ZOLL®

X Series® Configuration Manual

Includes Real CPR Help ® and See-Thru CPR ®

The issue date for the X Series Configuration Manual (**REF** 9650-001358-01 Rev. D) is **November, 2014**.

If more than 3 years have elapsed since the issue date, contact ZOLL Medical Corporation to determine if additional product information updates are available.

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Preface

The ZOLL® X Series® Configuration Manual provides information on how to configure the X Series defibrillator. It is important that all users who are involved with configuring the device read and understand all the information contained in this manual. The X Series Configuration Manual has four chapters and one appendix.

Chapter 1—Introduction provides information on how to change all the configuration settings on the X Series unit.

Chapter 2—Setup Menu provides a listing configuration settings that are located in the Setup menu.

Chapter 3—Parameter Menus provides a listing configuration settings that are located in the Parameter menus.

Chapter 4—Supervisor Menu provides a listing configuration settings that are located in the Supervisor menu.

Appendix A—Contains the menu structure for the Setup, Parameter, and Supervisor menus.

Configuration Manual Updates

An issue or revision date for this manual is shown on the front cover. If more than three years have elapsed since this date, contact ZOLL Medical Corporation to determine if additional product information updates are available.

All users should carefully review each manual update to understand its significance and then file it in its appropriate section within this manual for subsequent reference.

Product documentation is available through the ZOLL website at www.zoll.com. From the Products menu, choose Product Manuals.

Symbols

The following symbols are used in this manual:

Symbol	Description
	Attention, consult accompanying documents
	Manufacturer
EC REP	Authorized representative in the European Community
REF	Catalogue number

Conventions

This guide uses the following conventions:

Within text, the names and labels for physical buttons and soft keys appear in **boldface** type (for example, “Press the **OK** button”).

This guide uses uppercase italics for audible prompts and for text messages displayed on the screen (for example, *CONFIGURATION FILE NOT FOUND*).

Warning!	**Warning statements alert you to conditions or actions that can result in personal injury or death.**

Caution	Caution statements alert you to conditions or actions that can result in damage to the unit.

Chapter 1
Introduction

The X Series® unit has many user accessible settings that allow you to configure the device according to your protocols and local requirements. This manual describes how to view and modify the X Series configuration settings.

Note: Your unit only contains the features you have purchased. It may not contain all of the features listed in this manual.

You can view and modify configuration settings through the *Setup*, *Parameter*, and *Supervisor* menus. The Setup and Parameter menus are available to all users, while the Supervisor menu is restricted to authorized users and requires a passcode for entry. The Setup menu allows you to change configuration settings such as display, printer, and trends. The Parameter menus allow you to change current configuration settings such as NIBP and SpO_2. The Supervisor menu allows you to configure default settings such as alarms, NIBP, and Defib/Pacer.

Note: The X Series unit ships from ZOLL with both the default supervisor passcode and the service passcode set to 1234. ZOLL strongly recommends changing both when you receive the unit.

The Parameter menus share many of the same settings as the Supervisor menu. If the shared settings have been configured in the Supervisor menu, they can be modified in the Parameter menus, but they will default back to the Supervisor settings once the unit is turned off for two minutes.

The Setup, Parameter, and Supervisor menus are described in detail in separate chapters of this manual. These chapters contain information on how to access the menus as well as the settings that are contained in each menu and their default values.

This chapter contains the following information:

- Overview of the Setup, Supervisor, and Parameter Menus
- Exporting and Importing Configuration Information Using a USB Device
- Restoring Default Values

Overview of the Setup, Parameter, and Supervisor Menus

The following sections contain an general overview of the settings that can be accessed and modified in these menus. Each of these menus has a separate chapter in this manual that includes all the settings and their default values.

Setup Menu

The Setup menu allows you to view and modify parameters for the following features:

- **ECG**

  The basic ECG settings of the X Series unit, which include Filter Response, Heart Rate/Pulse Rate Tone, and Respiration Monitoring.

- **NIBP**

  The basic NIBP settings of the X Series unit, which consist of the NIBP Cuff Inflation Target Pressure.

- **Display/Volume**

  The basic visual settings and volume on the X Series unit, which include Display Brightness and Heart Rate/Pulse Rate Tone.

- **Printer**

  The basic printer settings on the X Series unit, which include Print Speed, Print Grid, and Print on Snapshot.

- **Trends**

  The basic trend settings on the X Series unit, which include Trend Display Format, logging trends in response to Interval, and logging trends in response to Alarms.

- **Operational Tests**

  The operational tests on the X Series unit, which include a Keypad Test, LED Test, and LCD Test.

- **Device Info**

  The technical information on the X Series unit, which includes Application Version, Serial Number, and Unit ID.

Parameter Menus

The Parameter menus allows you to view and modify parameters for the following features:

- **HR/PR Settings**

  The heart monitoring protocols on the X Series unit, which include HR/PR Alarm, LTA Monitor, and Extreme Brady/Tachy Alarm.

- **NIBP Settings**

  The noninvasive blood pressure monitoring protocols on the X Series unit, which include NIBP Systolic Alarm, NIBP Diastolic Alarm, NIBP MAP Alarm.

- **Resp Settings**

  The respiration monitoring protocols on the X Series unit, which include RR/BR Alarm, No Breath Alarm, and Respiration Monitoring.

- **SpO2 Settings**

  The pulse CO-oximetry monitoring protocols on the X Series unit, which include SpO2 Alarm and HR/PR Tone.

- **Temp Settings**

  The temperature monitoring protocols on the X Series unit, which include the alarm for channel 1, the alarm for channel 2, and the alarm for the difference between the two channels.

- **IBP1 Settings**

  The invasive blood pressure monitoring protocols on the X Series unit for the first channel, which include Systolic Pressure Alarm, Diastolic Pressure Alarm, and Mean Pressure Alarm.

- **IBP2 Settings**

  The invasive blood pressure monitoring protocols on the X Series unit for the second channel, which include Systolic Pressure Alarm, Diastolic Pressure Alarm, and Mean Pressure Alarm.

- **IBP3 Settings**

  The invasive blood pressure monitoring protocols on the X Series unit for the third channel, which include Systolic Pressure Alarm, Diastolic Pressure Alarm, and Mean Pressure Alarm.

Supervisor Menu

The Supervisor menu allows you to view and modify the default technical settings of the unit. Access to the Supervisor menu is passcode-protected, and only those users who are authorized to view and modify the configuration settings in the Supervisor menu may do so.

The Supervisor menu allows you to view and modify parameters for the following features:

- **Alarms Settings**

  Enable or disable alarms on the X Series unit and specify the alarm limits.

- **Log Settings**

  The Data recording settings of the X Series unit, which includes Treatment Buttons and Waveform Recording.

- **Defib/Pacer Settings**

  The defibrillation and pacer settings of the X Series unit, which include external and internal paddle energy settings and Default Pacer Mode.

- **ECG Settings**

  The ECG settings of the X Series unit, which include AC Mains Filter and 12-Lead ECG.

- **NIBP Settings**

  The NIBP settings of the X Series unit, which include Default NIBP Mode, Default Auto Mode Interval, and default cuff inflation target pressures.

- **Printer Settings**

  The printer settings of the X Series unit, which include Print on Defib/Pacer Events, Print on Event, and Print on Treatment Snapshot.

- **Display/Configuration Settings**

  The display settings of the X Series unit, which include language, unit settings, and color settings.

- **AED Settings**

  The AED settings of the X Series unit, which include voice prompts, CPR time, and energy protocols.

- **CPR Settings**

  The CPR settings of the X Series unit, which include CPR Time, Enable Metronome, and Enable CPR Prompts.

- **Communications Settings**

  The communications settings of the X Series unit, which include Wireless, Bluetooth, and Wi-Fi communication.

- **Service Settings**

  The technical maintenance settings of the X Series unit, which include Device Tests, software updates and upgrades, and diagnostics.

Exporting and Importing Configuration Settings

You can use a USB device to export and import a configuration file that contains system and patient setup information. Once a configuration file is exported to a USB device, it can be imported to other X Series units.

If you are planning on exporting a configuration to multiple X Series units, perform the export operation with a unit that has the most features or options. Otherwise, you may inadvertently modify configuration settings on the units that receive the imported file. For example, if you export a configuration file from a unit that does not have SpO_2 or NIBP options and import that file to a unit that does have SpO_2 and NIBP, the configuration settings for those options may revert to the default settings.

Exporting Configuration Information to USB

Exporting a configuration file exports the system and patient setup information to a file named ZollConfig.xml.

Note: If you currently have a file named ZollConfig.xml on the USB device, this procedure will cause the file to be overwritten.

Follow these steps to export a configuration to a USB device:

1. Insert the USB device into the X Series unit.
2. On the X Series unit, press the More ( ) and Setup ( ) quick access keys, and select Supervisor>Display/Configuration.
3. Select **Exporting to USB**. The message *DO NOT DISCONNECT THE USB* displays. When the export is complete, the message *EXPORT IS COMPLETE. YOU MAY NOW REMOVE THE USB DRIVE* displays.
4. Press **OK**.

Caution Apply an adhesive label to the USB device to clearly identify the configuration settings you have exported.

Note: If you make any changes to the configuration file you have just exported, you will not be able to import the file to another X Series unit.

Refer to page 9 for a listing of error messages that may occur while you are importing or exporting configuration information.

Importing Configuration Information from USB

Importing a configuration file imports the system and patient setup information from a file named ZollConfig.xml on the USB device.

Note: Make sure the file you are importing is named ZollConfig.xml. Otherwise, the import will not work.

Follow these steps to import a configuration from a USB device:

1. Insert the USB device into the X Series unit, and turn it on.
2. On the X Series unit, press the More ( ) and Setup ( ) quick access keys, and select Supervisor>Display/Configuration.
3. Select **Importing from USB**. The message *OPERATION WILL OVERWRITE SYSTEM CONFIGURATIONS AND ALARM SETTINGS. ARE YOU SURE?* displays.
4. Press **YES** to complete the import process. The message *DO NOT DISCONNECT THE USB* displays. When the import is complete, the message *IMPORT IS COMPLETE. YOU MAY NOW REMOVE THE USB DRIVE. THE DEVICE WILL AUTOMATICALLY RESET AFTER PRESSING THE "OK" BUTTON* displays.
5. Press **OK**.

Note: Review critical configuration values such as alarm, AED, defibrillator, and pacer settings to verify that you imported the correct configuration file.

Refer to page 9 for a listing of error messages that may occur while you are importing or exporting configuration information.

Export/Import System Messages

When exporting and importing system and patient information, the X Series unit may display the following error messages:

System Message	Cause/Action
CONFIGURATION FILE NOT FOUND	The configuration file (ZollConfig.xml) was not found on the USB device. Ensure that the connected USB device contains the configuration file. If required, generate a configuration file using the Export operation.
EXPORT OPERATION FAILED	An internal error occurred during the export process. Try repeating the export operation. If failure occurs again, try a different USB drive.
IMPORT OPERATION FAILED INVALID CONFIGURATION FILE	If the USB device is not new, retry the export and then retry the import operation. If the USB device is new and has not been formatted, reformat the device by selecting the FAT32 File System, changing the Allocation unit size to Default, and choosing the Quick Format option. Retry import operation.
IMPORT OPERATION FAILED A RESTORE ALL TO FACTORY DEFAULTS HAS BEEN PERFORMED	During the import process an unexpected failure occurred. All system and patient parameters have been restored to factory defaults. Retry import operation.
INCOMPATIBLE CONFIGURATION FILE	The device that exported the configuration file is not compatible with the device that is importing the file. This is caused by incompatible software releases. Contact the ZOLL Technical Service Department to update the earlier software version.
INSUFFICIENT SPACE ON USB DRIVE	The USB device did not have enough space to save the configuration file. The configuration file requires at least 1MB of free space.
INVALID USB DRIVE CONNECTED	The USB device connected was not recognized. Try a different USB device.
NO USB DRIVE INSERTED	No USB device was inserted in the side panel. Insert USB drive and retry.

Restoring Factory Default Configuration Settings

You can restore all the current configuration settings to their factory default settings. However, if the language is different than the default setting, it will not change.

Note: You must have authorized supervisor access to restore the factory default settings.

Restoring Default Values

1. Press the More ( ) and Setup ( ) quick access keys, and select Supervisor.
2. Enter the Supervisor passcode and select Display/Configuration.
3. Use the navigation keys to select **Restore All Factory Defaults**.

Chapter 2
Setup Menu

This chapter describes the configuration settings you can modify in the Setup menu. All users of the X Series unit can access the Setup menu, which allows you to view and modify basic settings of the unit.

Accessing the Setup Menu

You can access the Setup menu by pressing the More ( ) and Setup ( ) quick access keys. Use the navigation keys to highlight and select the appropriate parameters in the menu.

The Setup Menu includes the following parameters:

- "ECG Monitoring Parameters" on page 12
- "NIBP Monitoring Parameters" on page 14
- "Display/Volume Parameters" on page 15
- "Printer Parameters" on page 16
- "Trends Parameters" on page 18
- "Operational Tests" on page 19
- "Device Info" on page 19

ECG Monitoring Parameters

ECG monitoring parameters allow you to view and modify functions related to using the X Series unit's ECG monitoring function. These parameters include:

- Filter Response
- HR/PR Tone
- Resp Monitoring
- Resp Lead
- Patient Pace Marker
- Patient Pace Speed
- ECG Sweep Speed

Filter Response

The Filter Response parameter allows you to specify to what the ECG bandwidth filter is.

The values for the Filter Response parameter are**:**

Possible Values:	Limited, Monitor
Default:	Monitor

Limited:0.67-20 Hz

Monitor:0.67-40 Hz

HR/PR Tone

The HR/PR Tone parameter allows you to enable or disable the heart rate and pulse rate tone on the X Series unit.

The values for the HR/PR Tone parameter are:

Possible Values:	On, Off
Default:	On

Resp Monitoring

The Resp Monitoring parameter allows you to enable or disable the X Series respiration monitoring program.

The values for the Resp Monitoring parameter are:

Possible Values:	On, Off
Default:	On

Resp Lead

The Resp Lead parameter allows you to set which electrode the X Series unit monitors as its respiration lead.

The values for the Resp Lead parameter are:

Possible Values:	Lead I (RA-LA), Lead II (RA-LL)
Default:	Lead II (RA-LL)

Patient Pace Marker

The Patient Pace Marker parameter allows you to enable or disable the patient Pace Marker.

The values for the Patient Pace Marker parameter are:

Possible Values:	On, Off
Default:	On

When you select **Off**, the Pacer Off Indicator( ) icon appears in the top ECG trace on the Display Screen to indicate the pacer indicator is off. If the patient has a cardiac pacemaker the Paced Indicator should be set to **On** indicating that pace pulse detection is On.

ECG Sweep Speed

The ECG Sweep Speed parameter allows you to set the ECG sweep speed.

The values for the ECG Sweep Speed parameter are:

Possible Values:	25 mm/s, 50 mm/s
Default:	25 mm/s

NIBP Monitoring Parameters

NIBP monitoring parameters allow you to view and modify the NIBP settings of the X Series unit. These parameters include:

- NIBP Cuff Inflation Target

NIBP Cuff Inflation Target

The NIBP Cuff Inflation Target parameter allows you to select the default cuff inflation target pressure when you select NIBP monitoring.

The values for the NIBP Cuff Inflation Target parameter are:

Possible Values:	**Adult:** 120, 140, 160, 180, 200, 220, 240, 260 **Pediatric:** 80, 90, 100, 110, 120, 130, 140, 150 **Neonate:** 60, 70, 80, 90, 100, 110, 120, 130
Default:	**Adult:** 160 **Pediatric:** 120 **Neonate:** 90

Display/Volume Parameters

The Display/Volume parameters allow you to view and modify the visual and audio settings for the X Series unit.These parameters include:

- Display Brightness
- HR/PR Tone
- Volume

Display Brightness

The Display Brightness parameter allows you to set the brightness level for the monitor display.

The values for the Display Brightness parameter are:

Possible Values:	10%, 20%. 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
Default:	70%

HR/PR Tone

The HR/PR Tone parameter allows you to enable or disable the heart rate and pulse rate tone.

The values for the HR/PR Tone parameter are:

Possible Values:	On, Off
Default:	On

Volume

The Volume parameter allows you to set the volume level for the X Series unit and audio prompts.

The values for the Volume parameter are:

Possible Values:	Low, Medium, High
Default:	Medium

Warning! **Do not adjust the alarm signal volume lower than the ambient noise level as this may impede operator recognition of alarm signals.**

Printer Parameters

The Printer parameters allow you to view and modify settings related to the printing of recorded data. These parameters include:

- Print Speed
- Print Number of Traces
- Print Grid
- Print on Snapshot
- Print on Patient Alarm
- Print on NIBP
- Print on Trend

Print Speed

The Print Speed parameter allows you to select how fast data is printed.

The values for the Print Speed parameter are:

Possible Values:	25 mm/s, 50 mm/s
Default:	25 mm/s

Print Number of Traces

The Print Number of Traces parameter allows you to set how many traces are printed.

The values for the Print Number of Traces parameter are:

Possible Values:	1, 2, 3, 4
Default:	3

Print Grid

The Print Grid parameter allows you to specify that the data is printed on a grid.

The values for the Print Grid parameter are:

Possible Values:	On, Off
Default:	On

Print on Snapshot

The Print on Snapshot parameter allows you to enable or disable the printing of snapshots.

The values for the Print on Snapshot parameter are:

Possible Values:	On, Off
Default:	Off

Print on Patient Alarm

The Print on Patient Alarm parameter allows you to determine whether or not to print each time an alarm occurs.

The values for the Print on Patient Alarm parameter are:

Possible Values:	On, Off
Default:	Off

Print on NIBP

The Print on NIBP parameter allows you to determine whether or not to print NIBP measurements each time the unit takes them.

The values for the Print on NIBP parameter are:

Possible Values:	On, Off
Default:	Off

Print on Trend

The Print on Trend parameter allows you to determine whether or not to print trend values each time the unit takes a trend data snapshot.

The values for the Print on Trend parameter are:

Possible Values:	On, Off
Default:	Off

Trends Parameters

The Trends parameters allow you to view and modify settings related to trend information and all monitored vital sign measurements. These parameters include:

- Trend Display Format
- Trend Display Interval
- Trend on Alarm

Trend Display Format

The Trend Display Format parameter allows you to specify what vital sign measurements appear on the Trends status monitor.

The values for the Trend Display Format parameter are:

Possible Values:	Resp, SpO_2, Temp, P1, P2, P3, NIBP
Default:	NIBP

Resp Displays the following vital signs: HR, SpO2, RR, EtCO2, FiCO2

SpO2 Displays the following vital signs: HR, SpO2, SpCO®, SpMet®

Temp Displays the following vital signs: HR, SpO2, T1, T2, ΔT

P1 Displays the following vital signs: HR, SpO2, IBP1, RR

P2 Displays the following vital signs: HR, SpO2, IBP2, RR

P3 Displays the following vital signs: HR, SpO2, IBP3, RR

NIBP Displays the following vital signs: HR, SpO2, NIBP, RR

Trend Display Interval

The Trend Display Interval parameter allows you to specify the time interval to display trends.

The values for the Trend Display Interval parameter are:

Possible Values:	30 sec, 1 min, 5 min, 10 min, 15 min, 30 min, 60 min
Default:	5 min

Trend on Alarm

The Trend on Alarm parameter allows you to specify whether or not to log Trends each time an alarm occurs.

The values for the Trend on Alarm parameter are:

Possible Values:	On, Off
Default:	Off

Operational Tests

The Operational Tests allow you to ensure that the X Series unit is operating at optimal efficiency, and include:

- Keypad Test
- LED Test
- LCD Test
- RFU Indicator Test
- Audio Test
- Printer Test

Device Info

The Device Info section displays specific technical information about the X Series unit upon purchase, such as:

- Application Version
- Serial Number
- Unit ID
- Department Name
- Contact Telephone

Chapter 3
Parameter Menus

This chapter describes the configuration settings you can modify in the Parameter Menus. All X Series users can access the Parameter menus, which allow you to modify the monitoring protocols of the unit. The Parameter menus share many of the same settings as the Supervisor menu. If the shared settings have been configured in the Supervisor menu, they can be modified in the Parameter menus, but they will default back to the Supervisor settings once the unit is turned off for two minutes.

Accessing the Parameter Menus

You can access these menus in the monitoring window by pressing the Display/Home button ( ) and then use the navigation keys to highlight and select the appropriate settings in the menus.

The Parameter menus include the following parameters:

- "HR/PR Parameter Settings" on page 22
- "NIBP Parameter Settings" on page 24
- "Resp Parameter Settings" on page 28
- "SpO2 Parameter Settings" on page 30
- "Temp Parameter Settings" on page 34
- "IBP1 Parameter Settings" on page 37
- "IBP2 Parameter Settings" on page 40
- "IBP3 Parameter Settings" on page 43

HR/PR Parameter Settings

The HR/PR parameter settings allow you to view and modify functions related to using the X Series unit to monitor heart rate. These parameters include:

- HR/PR Alarm
- Extreme Brady/Tachy Alarms
- LTA (Life Threatening Alarms) Monitoring
- HR/PR Tone
- HR/PR Selected Source
- Current Source
- ECG Sweep Speed

HR/PR Alarm

The following options allow you to set the limits of the heart rate/pulse rate alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:.

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-300
Default:	Adult: 120 Pediatric: 150 Neonate: 200

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-298
Default:	Adult: 50 Pediatric: 50 Neonate: 100

Extreme Brady/Tachy Alarms

If LTA monitoring is enabled, the Extreme Brady/Tachy Alarms parameter allows you to set the limits of the Extreme Brady/Tachy alarms.

The values for the Extreme Brady/Tachy Alarm parameter are:

Possible Values:	Tachy: +5-+30 by 5's Brady: -5--30 by 5's
Default:	Tachy: +20 Brady: -10

LTA Monitoring

The LTA Monitoring parameter allows you to enable or disable LTA monitoring.

The values for the LTA Monitoring parameter are:

Possible Values:	On, Off
Default:	Off

HR/PR Tone

The HR/PR Tone parameter allows you to enable or disable the HR/PR tone.

The values for the HR/PR Tone parameter are:

Possible Values:	On, Off
Default:	On

HR/PR Selected Source

The HR/PR Selected Source parameter allows you to specify the HR/PR source.

The values for the HR/PR Selected Source parameter are:

Possible Values:	ECG, SpO2, P1, P2, P3
Default:	ECG

ECG Sweep Speed

The ECG Sweep Speed parameter allows you to set the ECG sweep speed.

The values for the ECG Sweep Speed parameter are:

Possible Values:	25 mm/s, 50 mm/s
Default:	25 mm/s

NIBP Parameter Settings

The NIBP parameter settings allow you to view and modify functions related to using the X Series unit for NIBP monitoring, and includes:

- NIBP Systolic Alarm
- NIBP Diastolic Alarm
- NIBP MAP Alarm
- NIBP Mode
- NIBP Auto Mode Interval
- SmartCuf On/Off

NIBP Systolic Alarm

The following options allow you to set the limits of the NIBP Systolic Alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	Adult: 32-260 Pediatric: 32-160 Neonate: 22-120
Default:	Adult: 220 Pediatric: 145 Neonate: 100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	Adult: 30-258 Pediatric: 30-158 Neonate: 20-118
Default:	Adult: 75 Pediatric: 75 Neonate: 50

NIBP Diastolic Alarm

The following options allow you to set the limits of the NIBP Diastolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	Adult: 22-220 Pediatric: 22-130 Neonate: 12-110
Default:	Adult: 110 Pediatric: 100 Neonate:70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	Adult: 20-218 Pediatric: 20-128 Neonate: 10-108
Default:	Adult: 35 Pediatric: 35 Neonate: 30

NIBP MAP Alarm

The following options allow you to set the limits of the NIBP MAP alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	Adult: 25-230 Pediatric: 25-140 Neonate: 15-110
Default:	Adult: 120 Pediatric: 110 Neonate: 80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	Adult: 23-228 Pediatric: 23-138 Neonate: 13-108
Default:	Adult: 50 Pediatric: 35 Neonate: 35

NIBP Mode

The NIBP Mode parameter allows you to set the NIBP Mode.

The values for the NIBP Mode parameter are:

Possible Values:	Manual, Auto
Default:	Manual

Manual: Unit takes a single NIBP measurement when you press the NIBP button ( ) on the front panel. To repeat, press the NIBP key again.

Auto: Unit takes the first of a series of NIBP measurements when the **NIBP Auto Mode Interval** timer expires, and then repeats the NIBP measurement at this specified interval.

NIBP Auto Mode Interval

If Auto Mode is selected, the NIBP Auto Mode Interval parameter allows you to set the interval time.

The values for the NIBP Auto Mode Interval parameter are:

Possible Values:	1 min, 2 min, 3 min, 5 min, 10 min, 15 min, 30 min, 60 min
Default:	5 min

SmartCuf On/Off

The SmartCuf On/Off parameter allows you to enable or disable SmartCuf.

The values for the SmartCuf On/Off parameter are:

Possible Values:	On, Off
Default:	On

Resp Parameter Settings

The Resp parameter settings allow you to view and modify functions related to using the X Series unit for respiration monitoring, and include:

- RR/BR Alarm
- No Breath Alarm
- Resp Monitoring
- Resp Lead
- CO2/Resp Sweep Speed

RR/BR Alarm

The following options allow you to set the limits of the Respiration Rate alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit are:

Possible Values:	5-150
Default:	Adult: 50 Pediatric: 50 Neonate: 80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	Adult: 3 Pediatric:3 Neonate: 12

No Breath Alarm

The No Breath Alarm parameter allows you to set the time of the No Breath alarm for all patient age groups.

The values for the No Breath Alarm parameter are:

Possible Values:	Adult: Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec Pediatric: Off, 10 sec. 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec Neonate: Off, 10 sec, 15 sec, 20 sec
Default:	Adult: Off Pediatric: Off Neonate: Off

Resp Monitoring

The Resp Monitoring parameter allows you to enable or disable Resp monitoring.

The values for the Resp Monitoring parameter are:

Possible Values:	On, Off
Default:	On

Resp Lead

The Resp Lead parameter allows you to specify the Lead cable used for Resp monitoring.

The values for the Resp Lead parameter are:

Possible Values:	Lead I (RA-LA), Lead II (RA-LL)
Default:	Lead II (RA-LL)

CO2/Resp Sweep Speed

The CO2/Resp Sweep Speed parameter allows you to set the CO2/Resp sweep speed.

The values for the CO2/Resp Sweep Speed parameter are:

Possible Values:	3.13 mm/s, 6.25 mm/s, 12.5 mm/s
Default:	12.5 mm/s

SpO2 Parameter Settings

The SpO2 parameter settings allow you to view and modify functions related to Pulse CO-Oximetry monitoring, and include:

- SpO2 Alarm
- SpCO Alarm
- SpMet Alarm
- Averaging Time
- Sensitivity
- HR/PR Tone

SpO2 Alarm

The following options allow you to set the limits of the SpO2 alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	52-100
Default:	Adult: 100 Pediatric: 100 Neonate: 95

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	50-98
Default:	85

SpCO Alarm

The following options allow you to set the limits of the SpCO alarm (if enabled) for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	On

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-100
Default:	Adult: 10 Pediatric: 10 Neonate: 10

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-98
Default:	Adult: 0 Pediatric: 0 Neonate: 0

SpMet Alarm

The following options allow you to set the limits of the SpMet alarm (if enabled) for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	On

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0-100.0
Default:	Adult: 3.0 Pediatric: 3.0 Neonate: 3.0

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0-98.0
Default:	Adult: 0.0 Pediatric: 0.0 Neonate: 0.0

SpCO Monitoring

The SpCO Monitoring parameter allows you to enable or disable SpCO monitoring. SpCO monitoring is not available on units with the SpO2 Nellcor module installed.

\The values for the SpCO Monitoring parameter are:

Possible Values:	On, Off
Default:	Off

SpMet Monitoring

The SpMet Monitoring parameter allows you to enable or disable SpMet monitoring. SpMet monitoring is not available on units with the SpO2 Nellcor module installed.

The values for the SpMet Monitoring parameter are:

Possible Values:	On, Off
Default:	Off

.Averaging Time

The Averaging Time parameter allows you to specify the SpO2 averaging time.

The values for the Averaging Time parameter are:

Possible Values:	4 seconds, 8 seconds, 16 seconds
Default:	8 seconds

Sensitivity

The Sensitivity parameter allows you to specify the sensitivity level of the SpO2 monitoring.

The values for the Sensitivity parameter are:

Possible Values:	Normal, Maximum
Default:	Normal

HR/PR Tone

The HR/PR parameter allows you to enable or disable heart rate/pulse rate monitoring.

The values for the HR/PR Tone parameter are:

Possible Values:	On, Off
Default:	On

Temp Parameter Settings

The Temp parameters allow you to view and modify functions related to using the X Series unit for temperature monitoring. These parameters include:

- T1 Alarm
- T2 Alarm
- ΔT Alarm
- T1 Source Label
- T2 Source Label

T1 Alarm

The following options allow you to set the limits of the T1 alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

T2 Alarm

The following options allow you to set the limits of the T2 alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

ΔT Alarm

The following options allow you to set the limits of the ΔT Alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 0.2-90.0 °C: 02-50.0
Default:	°F: 5.0 °C: 2.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 0.0-89.8 °C: 0.0-49.8
Default:	°F: 0.0 °C: 0.0

T1 Source Label

The T1 Source Label parameter allows you to specify the label for the T1 monitor.

The values for the T1 Source Label parameter are:.

Possible Values:	T1, ART, CORE, ESOPH, RECT, SKIN, VEN, NASO
Default:	T1

T2 Source Label

The T2 Source Label parameter allows you to specify the label for the T2 monitor.

The values for the T2 Source Label parameter are:

Possible Values:	T2, ART, CORE, ESOPH, RECT, SKIN, VEN, NASO
Default:	T2

IBP1 Parameter Settings

The IBP1 parameter settings allow you to view and modify functions related to the first channel of the X Series unit for invasive blood pressure monitoring, and include:

- P1 Systolic Alarm
- P1 Diastolic Alarm
- P1 Mean Alarm
- Source Label
- Display Format

P1 Systolic Alarm

The following options allow you to set the limits of the P1 Systolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 220 Pediatric: 145 Neonate: 100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 75 Pediatric: 75 Neonate: 50

P1 Diastolic Alarm

The following options allow you to set the limits of the P1 Diastolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 110 Pediatric:100 Neonate: 70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 35 Pediatric: 35 Neonate: 30

P1 Mean Alarm

The following options allow you to set the limits of the P1 Mean alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 120 Pediatric: 110 Neonate: 80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 50 Pediatric: 50 Neonate: 35

Source Label

The Source Label parameter allows you to specify the label of the P1 channel.

The values for the Source Label parameter are:

Possible Values:	P1, ABP, AO, ART, BAP, CVP, FAP, ICP, LAP, PAP, RAP, UAP, UVP
Default:	P1

Display Format

The Display Format parameter allows you to specify whether to display MAP measurement (M) with or without the Systolic (S) and Diastolic (D) measurements.

The values for the Display Format parameter are:

Possible Values:	S/D (M), S/D, (M) S/D, (M)
Default:	S/D (M)

IBP2 Parameter Settings

The IBP2 parameter settings allow you to view and modify functions related to the second channel of the X Series unit for invasive blood pressure monitoring, and include:

- P2 Systolic Alarm
- P2 Diastolic Alarm
- P2 Mean Alarm
- Source Label
- Display Format

P2 Systolic Alarm

The following options allow you to set the limits of the P2 Systolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 220 Pediatric: 145 Neonate: 100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 75 Pediatric: 75 Neonate: 50

P2 Diastolic Alarm

The following options allow you to set the limits of the P2 Diastolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 110 Pediatric: 100 Neonate: 70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 35 Pediatric: 35 Neonate: 30

P2 Mean Alarm

The following options allow you to set the limits of the P2 Mean alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 120 Pediatric: 110 Neonate: 80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 50 Pediatric: 50 Neonate: 35

Source Label

The Source Label parameter allows you to specify the label of the P2 channel.

The values for the Source Label parameter are:

Possible Values:	P2, ABP, AO, BAP, CVP, FAP, ICP, LAP, PAP, RAP, UAP, UVP
Default:	P2

Display Format

The Display Format parameter allows you to specify whether to display MAP measurement (M) with or without the Systolic (S) and Diastolic (D) measurements.

The values for the Display Format parameter are:

Possible Values:	S/D (M), S/D, (M) S/D, (M)
Default:	S/D (M)

IBP3 Parameter Settings

The IBP3 parameter settings allow you to view and modify functions related to the third channel of the X Series unit for invasive blood pressure monitoring, and include:

- P3 Systolic Alarm
- P3 Diastolic Alarm
- P3 Mean Alarm
- Source Label
- Display Format

P3 Systolic Alarm

The following options allow you to set the limits of the P3 Systolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 220 Pediatric: 145 Neonate: 100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 75 Pediatric: 75 Neonate: 50

P3 Diastolic Alarm

The following options allow you to set the limits of the P3 Diastolic alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 110 Pediatric: 100 Neonate: 70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 35 Pediatric: 35 Neonate: 30

P3 Mean Alarm

The following options allow you to set the limits of the P3 Mean alarm for all patient age groups.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	Adult: 120 Pediatric: 110 Neonate: 80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	Adult: 50 Pediatric: 50 Neonate: 35

Source Label

The Source Label parameter allows you to specify the label of the third channel.

The values for the Source Label parameter are:

Possible Values:	P3, ABP, AO, ART, BAP, CVP, FAP, ICP, PAP, RAP, UAP, UVP
Default:	P3

Display Format

The Display Format

parameter allows you to specify whether to display MAP measurement (M) with or without the Systolic (S) and Diastolic (D) measurements.

The values for the Display Format parameter are:

Possible Values:	S/D (M), S/D, (M) S/D, (M)
Default:	S/D (M)

Chapter 4
Supervisor Menu

This chapter describes the configuration settings you can modify in the Supervisor menu. The Supervisor menu allows you to configure default settings such as alarms, NIBP, and Defib/Pacer. Access to the Supervisor menu is passcode-protected and only users authorized to view and modify these settings may do so.

Accessing the Supervisor Menu

To access the Supervisor menu, press the More ( ) and Setup ( ) quick access keys, and select **Supervisor**. You are then required to enter the four digit Supervisor passcode before accessing the configurable options in the menus.

The Supervisor menu includes the following parameter settings.

- "Alarms Parameters" on page 48
- "Log Parameters" on page 113
- "Defib/Pacer Parameters" on page 116
- "ECG Parameters" on page 120
- "NIBP Parameters" on page 123
- "Printer Parameters" on page 125
- "Display/Configuration Parameters" on page 127
- "AED/Advisory Parameters" on page 138
- "CPR Parameters" on page 144
- "Communications Parameters" on page 148
- "Service Parameters" on page 161

Alarms Parameters

The Alarm parameters allow you to view and modify functions related with Alarm states and thresholds for the X Series unit. The main level parameters in this menu include:

- General
- Default Adult
- Default Pediatric
- Default Neonate

General

This following options allow you to specify basic conditions for all alarms.

Default Patient Mode

The Default Patient Mode parameter allows you to specify the default age group of the patients using the X Series unit.

The values for the Default Patient Mode parameter are:

Possible Values:	Adult, Pediatric, Neonate
Default:	Adult

Volume

The Volume parameter allows you to set the volume level for all alarms.

The values for the Volume parameter are:

Possible Values:	Low, Medium, High
Default:	Medium

Audio Paused Time (Alarm Suspend Time)

The Audio Paused Time parameter allows you to specify how long any alarm is paused (suspended). No Alarms sound during the pause time period, however, if an alarm occurs during this period, the visual alarm indicators display.

The values for theAudio Paused Time parameter are:

Possible Values:	Disable, 2 min, 4 min, 15 min
Default:	4 min

Alarm Latching Enable

The Alarm Latching Enable parameter allows you to turn alarm latching on or off for high priority patient alarms. When alarms are configured to be latching, alarm indicators (sound, message, color) remain whether or not the condition is present. Latched alarms must be acknowledged even if the condition no longer exists. When alarms are configured as non-latching alarm indicators clear when the alarm condition ends whether or not the alarm was acknowledged.

The values for Alarm Latching Enable parameter are:

Possible Values:	Yes, No
Default:	No

Reminder Alarm

The Alarm Reminder parameter allows you to specify whether to have a alarm reminder sound when an Audio Off condition persists. If you select **Enable** a reminder alarm will sound every 5, 10 or 15 minutes (depending on configuration) while the Audio Off condition continues.

Possible Values:	Enable, Disable
Default:	Disable

Reminder Alarm Interval

The Reminder Alarm Interval parameter allows you to specify how often an alarm reminder will sound when an Audio Off condition exists.

Possible Values:	5 min, 10 min, 15 min
Default:	5 min

Default Adult

The following options allow you specify the alarm limits for adult patients.

LTA (Life Threatening Alarms) Monitoring

The LTA Monitoring parameter allows you to enable or disable adult LTA monitoring.

The values for the LTA Monitoring parameter are:.

Possible Values:	On, Off
Default:	Off

HR/PR Alarm

The following options allow you to set the limits of the adult HR/PR alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-300
Default:	120

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-298
Default:	50

NIBP Systolic Alarm

The following options allow you to set the limits of the adult NIBP Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-260
Default:	220

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-258
Default:	75

NIBP Diastolic Alarm

The following options allow you to set the limits of the adult NIBP Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	22-220
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	20-218
Default:	35

NIBP MAP Alarm

The following options allow you to set the limits of the adult NIBP MAP alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	25-230
Default:	120

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	23-228
Default:	50

EtCO2 Alarm

The following options allow you to set the limits of the adult EtCO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	5-150
Default:	60

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	8

FiCO2 Alarm

The following options allow you to set the limits of the adult FiCO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-98
Default:	8

RR/BR Alarm

The following options allow you to set the limits of the adult RR/BR alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	5-150
Default:	50

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	3

No Breath Alarm

The No Breathe Alarm parameter allows you to specify the time of the adult No Breath alarm.

The values for the No Breath Alarm are:

Possible Values:	Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec
Default:	Off

SpO2 Alarm

The following options allow you to set the limits of the adult SpO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	52-100
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	50-98
Default:	85

SpCO Alarm

The following options allow you to set the limits of the adult SpCO alarm.

Note: CO with the SpO2

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-100
Default:	10

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	1-98
Default:	0

SpMet Alarm

The following options allow you to set the limits of the adult SpMet alarm.

Note: The SpMet Alarm parameter settings are not available on units with the SpO2 Nellcor module installed.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2.0-100.0
Default:	3.0

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0.0-98.0
Default:	0.0

T1 Alarm

The following options allow you to set the limits of the adult T1 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

T2 Alarm

The following options allow you to set the limits of the adult T2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

ΔT Alarm

The following options allow you to set the limits of the adult ΔT alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 0.2-90.0 °C: 0.2-50.0
Default:	°F: 5.0 °C: 2.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 0.0-89.8 °C: 0.0-49.8
Default:	°F: 0.0 °C: 0.0

P1 Systolic Alarm

The following options allow you to set the limits of the adult P1 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	220

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	75

P1 Diastolic Alarm

The following options allow you to set the limits of the adult P1 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P1 Mean Alarm

The following options allow you to set the limits of the adult P1 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	120

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P2 Systolic Alarm

The following options allow you to set the limits of the adult P2 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	220

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	75

P2 Diastolic Alarm

The following options allow you to set the limits of the adult P2 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P2 Mean Alarm

The following options allow you to set the limits of the adult P2 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	120

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P3 Systolic Alarm

The following options allow you to set the limits of the adult P3 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	220

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	75

P3 Diastolic Alarm

The following options allow you to set the limits of the adult P3 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P3 Mean Alarm

The following options allow you to set the limits of the adult P3 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	120

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

Default Pediatric

The following options allow you to specify the alarm limits for pediatric patients.

LTA Monitoring

The LTA Monitoring parameter allows you to enable or disable pediatric LTA Monitoring.

The values for the LTA Monitoring parameter are:

Possible Values:	On, Off
Default:	Off

HR/PR Alarm

The following options allow you to set the limits of the pediatric HR/PR alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-300
Default:	150

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-298
Default:	50

NIBP Systolic Alarm

The following options allow you to set the limits of the pediatric NIBP Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-160
Default:	145

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-158
Default:	75

NIBP Diastolic Alarm

The following options allows you to set the limits of the pediatric NIBP Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-130
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-128
Default:	35

NIBP MAP Alarm

The following options allow you to set the limits of the pediatric NIBP MAP alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	25-140
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	23-138
Default:	50

EtCO2 Alarm

The following options allow you to set the limits of the pediatric EtCO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	5-150
Default:	60

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	8

FiCO2 Alarm

The following options allows you to set the limits of the pediatric FiCO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-98
Default:	8

RR/BR Alarm

The following options allow you to set the limits of the pediatric RR/BR alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	5-150
Default:	50

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	3

No Breath Alarm

The No Breath Alarm parameter allows you to specify the time of the pediatric No Breath alarm.

The values for the No Breath Alarm parameter are:.

Possible Values:	Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec
Default:	Off

SpO2 Alarm

The following options allow you to set the limits of the pediatric SpO2 alarm/

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	52-100
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	50-98
Default:	85

SpCO Alarm

The following options allow you to set the limits of the pediatric SpCO alarm.

Note: The SpCO Alarm parameter settings are not available on units with the SpO2 Nellcor module installed.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-100
Default:	10

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	1-98
Default:	0

SpMet Alarm

The following options allow you to set the limits of the pediatric SpMet alarm.

Note: The SpMet Alarm parameter settings are not available on units with the SpO2 Nellcor module installed.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2.0-100.0
Default:	3.0

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0.0-98.0
Default:	0.0

T1 Alarm

The following options allows you to set the limits of the pediatric T1 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

T2 Alarm

The following options allow you to set the limits of the pediatric T2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

ΔT Alarm

The following options allows you to set the limits of the pediatric ΔT alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 0.2-90.0 °C: 0.2-50.0
Default:	°F: 5.0 °C: 2.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 0.0-89.8 °C: 0.0-49.8
Default:	°F: 0.0 °C: 0.0

P1 Systolic Alarm

The following options allows you to set the limits of the pediatric P1 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	145

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	75

P1 Diastolic Alarm

The following options allow you to set the limits of the pediatric P1 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P1 Mean Alarm

The following options allow you to set the limits of the pediatric P1 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P2 Systolic Alarm

The following options allow you to set the limits of the pediatric P2 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	145

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	75

P2 Diastolic Alarm

The following options allow you to set the limits of the pediatric P2 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P2 Mean Alarm

The following options allow you to set the limits of the pediatric P2 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P3 Systolic Alarm

The following options allow you to set the limits of the pediatric P3 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	145

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	75

P3 Diastolic Alarm

The following options allows you to set the limits of the pediatric P3 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P3 Mean Alarm

The following options allow you to set the limits of the pediatric P3 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	110

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

Default Neonate

The following options allow you to specify the alarm limits for neonate patients.

HR/PR Alarm

The following options allow you to set the limits of the neonate HR/PR alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	32-300
Default:	200

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	30-298
Default:	100

NIBP Systolic Alarm

The following options allow you to set the limits of the neonate NIBP Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	22-120
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	20-118
Default:	50

NIBP Diastolic Alarm

The following options allow you to set the limits of the neonate NIBP Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	12-110
Default:	70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	10-108
Default:	30

NIBP MAP Alarm

The following options allow you to set the limits of the neonate NIBP MAP alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	15-110
Default:	80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	13-108
Default:	35

EtCO2 Alarm

The following options allow you to set the limits of the neonate EtCO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	5-150
Default:	60

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	8

FiCO2 Alarm

The following options allow you to set the limits of the neonate FiCO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-98
Default:	8

RR/BR Alarm

The following options allow you to set the limits of the neonate RR/BR alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	5-150
Default:	80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0-145
Default:	12

No Breath Alarm

The No Breath Alarm parameter allows you to specify the time of the neonate No Breath alarm.

The values for the No Breath Alarm parameter are:

Possible Values:	Off, 10 sec, 15 sec, 20 sec
Default:	20 sec

SpO2 Alarm

The following options allow you to set the limits of the neonate SpO2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	52-100
Default:	95

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	50-98
Default:	85

SpCO Alarm

The following options allow you to set the limits of the neonate SpCO alarm.

Note: The SpCO Alarm parameter settings are not available on units with the SpO2 Nellcor module installed.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2-100
Default:	10

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	1-98
Default:	0

SpMet Alarm

The following options allow you to set the limits of the neonate SpMet alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	2.0-100.0
Default:	3.0

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	0.0-98.0
Default:	0.0

T1 Alarm

The following options allow you to set the limits of the neonate T1 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

T2 Alarm

The following options allow you to set the limits of the neonate T2 alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 34.0-122.0 °C: 2.0-50.0
Default:	°F: 100.0 °C: 37.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 32.0-120.0 °C: 0.0-48.0
Default:	°F: 95.0 °C: 35.0

ΔT Alarm

The following options allow you to set the limits of the neonate ΔT alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	°F: 0.2-90.0 °C: 0.2-50.0
Default:	°F: 5.0 °C: 2.8

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	°F: 0.0-89.8 °C: 0.0-49.8
Default:	°F: 0.0 °C: 0.0

P1 Systolic Alarm

The following options allows you to set the limits of the neonate P1 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P1 Diastolic Alarm

The following options allow you to set the limits of the neonate P1 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	30

P1 Mean Alarm

The following options allow you to set the limits of the neonate P1 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P2 Systolic Alarm

The following options allow you to set the limits of the neonate P2 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P2 Diastolic Alarm

The following options allow you to set the limits of the neonate P2 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	30

P2 Mean Alarm

The following options allow you to set the limits of the neonate P2 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

P3 Systolic Alarm

The following options allow you to set the limits of the neonate P3 Systolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	100

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	50

P3 Diastolic Alarm

The following options allow you to set the limits of the neonate P3 Diastolic alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	70

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	30

P3 Mean Alarm

The following options allow you to set the limits of the neonate P3 Mean alarm.

Upper Limit Enable

The Upper Limit Enable parameter allows you to enable or disable the upper limit.

The values for the Upper Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Lower Limit Enable

The Lower Limit Enable parameter allows you to enable or disable the lower limit.

The values for the Lower Limit Enable parameter are:

Possible Values:	On, Off
Default:	Off

Upper Limit

The Upper Limit parameter allows you to set the upper limit.

The values for the Upper Limit parameter are:

Possible Values:	-28-300
Default:	80

Lower Limit

The Lower Limit parameter allows you to set the lower limit.

The values for the Lower Limit parameter are:

Possible Values:	-30-298
Default:	35

Log Parameters

The Log parameters allow you to view and modify functions related to recording data. The main level parameters in this menu include:

- Treatment Options
- Waveform Recording

Treatment Options

The following options allow you to set values related to Treatment options.

Configuration Method

The Configuration Method parameter allows you specify from what listing to configure Treatment buttons.

The values for the Configuration Method parameter are:

Possible Values:	Select From Predefined List, Define Custom Labels
Default:	Select From Predefined List

Treatment Button #1

The Treatment Button #1 parameter allows you to specify what treatment option Button #1 covers.

The values for the Treatment Button #1 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	O2

Treatment Button #2

The Treatment Button #2 parameter allows you to specify what treatment option Button #2 covers.

The values for the Treatment Button #2 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	ASA

Treatment Button #3

The Treatment Button # 3 parameter allows you to specify what treatment option Button #3 covers.

The values for the Treatment Button #3 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	Nitro

Treatment Button #4

The Treatment Button #4 parameter allows you to specify what treatment option Button #4 covers.

The values for the Treatment Button #4 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	Morph

Treatment Button #5

The Treatment Button #5 parameter allows you to specify what treatment option Button #5 covers.

The values for the Treatment Button #5 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	IV

Treatment Button #6

The Treatment Button #6 parameter allows you to specify what treatment option Button #6 covers.

The values for the Treatment Button #6 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	B Block

Treatment Button #7

The Treatment Button #7 parameter allows you to specify what treatment option Button #7 covers.

The values for the Treatment Button #7 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	Lido

Treatment Button #8

The Treatment Button #8 parameter allows you to specify what treatment option Button #8 covers.

The values for the Treatment Button #8 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	MgSO4

Treatment Button #9

The Treatment Button #9 parameter allows you to specify what treatment option Button #9 covers.

The values for the Treatment Button #9 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	Valium

Treatment Button #10

The Treatment Button #10 parameter allows you to specify what treatment option Button #10 covers.

The values for the Treatment Button #10 parameter are:

Possible Values:	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
Default:	Sedate

Waveform Recording

The following options allow you to set values related to waveform recording.

Continuous Waveform Recording

The Continuous Waveform Recording parameter allows you to enable or disable continuous waveform recording.

The values for the Continuous Waveform Recording parameter are:

Possible Values:	Disabled, Enabled
Default:	Disabled

Record Displayed Waveforms

If enabled, the Record Displayed Waveform parameter allows you to specify which displayed waveforms are recorded.

The values for the Record Displayed Waveforms parameter are:

Possible Values:	All Displayed Waveforms, Top Waveform Only
Default:	All Displayed Waveforms

Record Additional Waveforms

If enabled, the Record Additional Waveform parameter allows you to specify what additional waveforms are recorded.

The values for the Record Additional Waveforms parameter are:

Possible Values:	CO2 Capnogram, IBP and CO2 Capnogram
Default:	CO2 Capnogram

Record Pads Imp. Waveform

The Record Pads Imp. Waveform parameter allows you to enable or disable pads impedance recording.

The values for the Continuous Waveform Recording parameter are:

Possible Values:	Disabled, Enabled
Default:	Disabled

Defib/Pacer Parameters

The Defib/Pacer parameters allow you to view and modify functions related to performing defibrillation and pacing with an X Series unit. The main level parameters in this menu include:

- Default Settings
- Energy Escalation

Default Settings

Adult Defib Ext. Pdl. Energy

The Adult Defib Ext. Pdl. Energy parameter allows you to set the energy level of the external paddle for adult patients.

The values for the Adult Defib Ext. Pdl. Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J, 85 J, 100 J, 120 J, 150 J, 200 J
Default:	120 J

Pediatric Defib Ext. Pdl. Energy

The Pediatric Defib Ext. Pdl. Energy parameter allows you to set the energy level of the external paddle for pediatric patients.

The values for the Pediatric Defib Ext. Pdl. Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J, 85 J, 100 J, 120 J, 150 J, 200 J
Default:	50 J

Neonate Defib Ext. Pdl. Energy

The Neonate Defib Ext. Pdl. Energy parameter allows you to set the energy level of the external paddle for neonate patients.

The values for the Neonate Defib Ext. Pdl. Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J, 85 J, 100 J, 120 J, 150 J, 200 J
Default:	50 J

Adult Defib Int. Pdl. Energy

The Adult Defib Int. Pdl. Energy parameter allows you to set the energy level of the internal paddle for adult patients.

The values for the Adult Defib Int. Pdl. Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J
Default:	10 J

Pediatric Defib Int. Pdl. Energy

The Pediatric Defib Int. Pdl. Energy parameter allows you to set the energy level of the internal paddle for pediatric patients.

The values for the Pediatric Defib Int. Pdl. Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J,
Default:	10 J

Neonate Defib Int. Pdl. Energy

The Neonate Defib Int. Pdl. Energy parameter allows you to set the energy level of the internal paddle for neonate patients.

The values for the Neonate Defib Int. Pdl. Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J
Default:	10 J

Sync After Cardioversion

The Sync After Cardioversion parameter allows you to enable or disable synchronizing the defibrillator discharge with the ECG R-wave.

The values for the Sync After Cardioversion parameter are:

Possible Values:	On, Off
Default:	Off

Default Pacer Mode

The Default Pacer Mode parameter allows you to set the default Pacer Mode.

The values for the Default Pacer Mode parameter are:

Possible Values:	Demand, Fixed
Default:	Demand

Demand: pacing pulses are inhibited by the patients QRS complexes that occur during an interval that is dependant on the setting of the rate control. If during that interval no QRS complexes are detected, a pacing pulse is delivered to the patient, the number of which and the rate are selected in the pacing rate window.

Fixed: pacing pulses are not dependant on the patient's cardiac activity and are delivered at the selected pacing rate.

Default Pacer Rate

The Default Pacer Rate parameter allows you to set the default Pacer rate.

The values for the Default Pacer Rate parameter are:

Possible Values:	30-180; <100 by 5's, >100 by 10's
Default:	70

Auto Display Pads/Paddles

The Auto Display Pads/Paddles parameter allows you to enable/disable the display of Pads or Paddles as the top waveform trace when the Defibrillation Control Panel is active.

Note: Note: This parameter is only applicable to X Series units with CP version 02.08.011.4084 and MP/PP version 02.18.03.00 or higher.

The values for the Auto Display Pads/Paddles parameter are:

Possible Values:	Yes, No
Default:	Yes

Energy Escalation

The following options allow you to set the energy levels of the shocks given.

Basic Auto Energy Selection

The Basic Auto Energy Selection parameter automatically escalates the defibrillator energy settings in Manual mode. This feature will operate only when Pads or Paddles are connected. Connecting internal paddles at any time during Basic Auto Energy Escalation will reset the energy back to the Internal Paddle energy level selected in Default Settings.

When enabled, the Adult Defib Ext. Pdl Energy and Pediatric Defib Ext. Pdl. Energy parameters in Default Settings are grayed out.

The values for Basic Auto Energy Selection are:

Possible Values:	Disabled, Enabled
Default:	Disabled

Adult Shock 1 Energy

The Adult Shock 1 Energy parameter allows you to set the energy level of the first shock given for adult patients.

The values for the Adult Shock 1 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	120 J

Adult Shock 2 Energy

The Adult Shock 2 Energy parameter allows you to set the energy level of the second shock given for adult patients.

The values for the Adult Shock 2 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	150 J

Adult Shock 3 Energy

The Adult Shock 3 Energy parameter allows you to set the energy level of the third shock given for adult patients.

The values for the Adult Shock 3 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	200 J

Pediatric Shock 1 Energy

The Pediatric Shock 1 Energy parameter allows you to set the energy level of the first shock given for pediatric patients.

The values for the Pediatric Shock 1 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	50 J

Pediatric Shock 2 Energy

The Pediatric Shock 2 Energy parameter allows you to set the energy level of the second shock given for pediatric patients.

The values for the Pediatric Shock 2 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	70 J

Pediatric Shock 3 Energy

The Pediatric Shock 3 Energy parameter allows you to set the energy level of the third shock given for pediatric patients.

The values for the Pediatric Shock 3 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	85 J

ECG Parameters

The ECG parameters allow you to view and modify functions related to using the X Series unit for ECG monitoring. The main level parameters in this menu include:

- General
- 12-Lead ECG

General

AC Mains Filter

The AC Mains Filter parameter allows you to specify how much energy is used by the AC mains filter.

The values for the AC Mains Filter parameter are:

Possible Values:	Off, 50 Hz, 60 Hz
Default:	60 Hz

Auto Add Filter ECG

The Auto Add Filter ECG parameter allows you to specify whether to enable the automatic insertion of a filtered ECG trace when CPR compressions are detected. The filtered ECG uses the lead assigned to the top trace and removes compression artifacts out of the ECG signal reducing the artifact caused by chest compressions. When Auto Add Filter ECG is enabled the text Filt. ECG displays below the top trace. The automatic insertion of a filtered ECG trace only occurs once per patient case.

Note: The filtered ECG is available with Manual and Advisory Protocol operations. It is not available during AED operation.

The values for the Automatically Add Filter ECG parameter are:

Possible Values:	Yes, No
Default:	No

12-Lead ECG

The following options allow you to set values related to the X Series unit's 12-Lead ECG cables.

Print on 12-Lead Acquire

The Print on 12-Lead Acquire parameter allows you enable or disable printing of data acquired by the 12-Lead electrode cables.

The values for the Print on 12-Lead Acquire parameter are:

Possible Values:	On, Off
Default:	Off

Print Copies

The Print Copies parameter allows to specify how many copies of data are printed.

The values for the Print Copies parameter are:

Possible Values:	1, 2, 3, 4, 5
Default:	1

12-Lead Format

The 12-Lead Format parameter allows you to specify the print format of 12-Lead data.

The values for the 12-Lead Format parameter are:

Possible Values:	2x6, 3x4, 3x4 Cabrera
Default:	3x4

Print 10s Ldll

The Print 10s Ldll parameter allows you to enable or disable the X Series unit printing 10 seconds of the Lead II waveform after printing a 12-Lead snapshot.

The values for the Print 10s Ldll parameter are:

Possible Values:	On, Off
Default:	On

12-Ld Frequency Response

The 12-Ld Frequency Response parameter allows you to specify the 12-Lead waveform frequency response.

The values for the 12-Ld Frequency Response parameter are:

Possible Values:	Diagnostic, Filtered Diagnostic
Default:	Filtered Diagnostic

Diagnostic: frequency ranges are 0.525-150 Hz.

Filtered Diagnostic: frequency ranges are 0.525-40 Hz.

12-Ld Analysis Enabled

The 12-Ld Analysis Enabled parameter allows you to enable or disable the 12-Lead Interpretive Analysis capability.

Note: This parameter is available only if the 12-Lead Interpretive Analysis option has been purchased.

The values for the 12-Ld Frequency Response parameter are:

Possible Values:	On, Off
Default:	On

Patient Information Prompt

The Patient Information Prompt parameter allows you to specify whether to prompt the user to enter patient demographic data (age, gender etcetera) before initiating 12-Lead Interpretive Analysis. When the Patient Information Prompt is enabled (On) and patient age and gender has not been previously provided for the current case, the Patient Information screen displays when the **Acquire** quick access key ( ) is pressed to initiate 12-Lead Interpretive Analysis. The automatic display of the Patient Information screen only occurs once per case.

The values for the Patient Information Prompt parameter are:

Possible Values:	On, Off
Default:	On

Print 12-Ld 1mV Bracket

The Print 12-Ld 1mV Bracket parameter allows you to enable or disable the display of the 1mV calibration bracket next to ECG waveform traces on the 12 Lead Snapshot report. If enabled the 1mV calibration bracket will appear on all 12 Lead Snapshot reports (3 x 4 Cabrera, 3 x 4, and 2 x 6).

The values for the Print 12-Ld 1mV Bracket parameter are:

Possible Values:	Yes, No
Default:	No

NIBP Parameters

The NIBP parameters allow you to view and modify functions related to using the X Series unit for noninvasive blood pressure monitoring. The main level parameters in this menu include:

- Default NIBP Mode
- Default Auto Mode Interval
- Default Cuff Inflation Target (Adult)
- Default Cuff Inflation Target (Ped.)
- Default Cuff Inflation Target (Neo.)

Default NIBP Mode

The Default NIBP Mode parameter allows you to set the X Series unit NIBP Mode.

The values for the Default NIBP Mode parameter are:

Possible Values:	Manual, Auto
Default:	Manual

Manual: unit takes a single NIBP measurement when you press the NIBP button on the front panel ( ). To repeat, press the NIBP key again.

Auto: unit takes the first of a series of NIBP measurements when the **Auto Interval** timer expires, and then repeats the NIBP measurement at this specified interval.

Default Auto Mode Interval

The Default Auto Mode Interval parameter allows you to specify the NIBP measurement interval time in Auto Mode.

The values for the Default Auto Mode Interval parameter are:

Possible Values:	1 min, 2 min, 3 min, 5 min, 10 min, 15 min, 30 min, 60 min
Default:	5 min

Default Cuff Inflation Target (Adult)

The Default Cuff Inflation Target (Adult) parameter allows you to set the cuff inflation target for adult patients.

The values for the Default Cuff Inflation Target (Adult) parameter are:

Possible Values:	120-260; by 20’s
Default:	160

Default Cuff Inflation Target (Ped.)

The Default Cuff Inflation Target (Pediatric) parameter allows you to set the cuff inflation target for pediatric patients.

The values for the Default Cuff Inflation Target (Ped.) parameter are:

Possible Values:	80-150; by 10's
Default:	120

Default Cuff Inflation Target (Neo.)

The Default Cuff Inflation Target (Neonate) parameter allows you to set the cuff inflation target for neonate patients.

The values for the Default Cuff Inflation Target (Neo.) parameter are:

Possible Values:	60-130; by 10's
Default:	90

Printer Parameters

The Printer parameters allow you to view and modify what and how things are printed. The main level parameters in this menu include:

- Print on Defib/Pacer Events
- Print on Event
- Print on Treatment Snapshot
- Print Treatment Summary Snapshot
- Print on Analysis Results
- Print on Presenting Rhythm

Print on Defib/Pacer Events

The Print on Defib/Pacer Events parameter allows you to enable or disable automatic printing on Defib/Pacer events.

The values for the Print on Defib/Pacer Events parameter are:

Possible Values:	On, Off
Default:	On

Print on Event

The Print on Event parameter allows you to enable or disable automatic printing on events.

The values for the Print on Event parameter are:

Possible Values:	On, Off
Default:	Off

Print on Treatment Snapshot

The Print on Treatment Snapshot parameter allows you to enable or disable automatic printing on treatment snapshots.

The values for the Print on Treatment Snapshot parameter are:

Possible Values:	On, Off
Default:	Off

Print Treatment Summary Snapshots

The Print Treatment Summary Snapshots parameter allows you to enable or disable automatic printing on treatment summary snapshots.

The values for the Print Treatment Summary Snapshots parameter are:

Possible Values:	On, Off
Default:	On

Print on Analysis Results

The Print on Analysis Results parameter allows you to enable or disable automatic printing on analysis results.

The values for the Print on Analysis Results parameter are:

Possible Values:	On, Off
Default:	Off

Print on Presenting Rhythm

The Print on Presenting Rhythm parameter allows you to enable or disable automatic printing on presenting rhythm.

The values for the Print on Presenting Rhythm parameter are:

Possible Values:	On, Off
Default:	Off

Display/Configuration Parameters

The Display/Configuration parameters allow you to view and modify what and how things appear on the X Series monitor. The main level parameters in this menu include:

- Localization
- Color
- Device Info
- Time Format
- Display Setup
- Supervisor Code
- Log Clear Code

Note: The Import Configuration and Export Configuration features are included this menu, but they cannot be modified. See “Exporting and Importing Configuration Settings” on page 7 for information on how to use these features.

Localization

The following options allow you to set language and units in accordance to local region.

Language

The Language parameter specifies what language the X Series unit uses.

The values for the Language parameter are:

Possible Values:	English, Swedish, Finnish, Danish, Dutch, Spanish, German, Italian, French, Norwegian, Polish, French Canadian, Japanese, Korean (Voice only), Arabic (Voice only)
Default:	English

Decimal Format

The Decimal parameter allows you to set what decimal is used.

The values for the Decimal parameter are:

Possible Values:	. (dot), , (comma)
Default:	. (dot)

Date Format

The Date parameter allows you to set how the date is displayed.

The values for the Date parameter are:

Possible Values:	MM/DD/YYYY, DD/MM/YYY, YYY/MM/DD, MM-DD-YYYY, DD-MM-YYYY, YYYY-MM-DD
Default:	MM/DD/YYYY

Time Format

The Time Format parameter allows you to set how the time is displayed.

The values for the Time Format parameter are:

Possible Values:	12 Hour, 24 Hour
Default:	24 Hour

Temp Units

The Temp parameter allows you to set what temperature unit is used.

The values for the Temp Units parameter are:

Possible Values:	°F, °C
Default:	°F

IBP Units

The IBP Units parameter allows you to set what unit is use for IBP monitoring.

The values for the IBP Units parameter are:

Possible Values:	mmHg, kPa
Default:	mmHg

CO2 Units

The CO2 Units parameter allows you to set what unit is used for CO2 monitoring.

The values for the CO2 Units parameter are:

Possible Values:	mmHg, kPa,%
Default:	mmHg

NIBP Units

The NIBP Units parameter allows you to set what unit is used for NIBP monitoring.

The values for the NIBP Units parameter are:

Possible Values:	mmHg, kPa
Default:	mmHg

ECG Lead Labels

The ECG Lead Labels parameter allows you to set the labels for the ECG Lead cables.

The values for the ECG Lead Labels parameter are:

Possible Values:	AAMI, IEC
Default:	AAMI

NIBP Display Format

The NIBP Display Format parameter allows you to specify whether to display MAP measurement (M) with or without the Systolic (S) and Diastolic (D) measurements.

The values for the NIBP Display Format parameter are:

Possible Values:	S/D (M), (M) S/D
Default:	S/D (M)

Length Units

The Length Units parameter allows you to set the length units.

The values for the Length Units parameter are:

Possible Values:	Inch, cm
Default:	Inch

AC Mains Filter

The AC Mains Filter parameter allows you to specify how much energy is used by the AC mains filter.

The values for the AC Mains Filter parameter are:

Possible Values:	Off, 50 Hz, 60 Hz
Default:	60 Hz

Color

The following options allows you to set the display colors for specific waveforms and information displayed on the X Series monitor.

ECG Color

The ECG Color parameter allows you to specify the color for the ECG indicator on the X Series monitor.

The values for the ECG Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Green

SpO_2 Color

The SpO2 Color parameter allows you to specify the color of the SpO_2 indicator on the X Series monitor.

The values for the SpO2 Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Yellow

SpCO Color

The SpCO Color parameter allows you to specify the color of the SpCO indicator on the X Series monitor.

The values for the SpCO Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Yellow

SpMet Color

The SpMet Color parameter allows you to specify the color of the SpMet indicator on the X Series monitor.

The values for the SpMet Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Yellow

NIBP Color

The NIBP Color parameter allows you to specify the color of the NIBP indicator on the X Series monitor.

The values for the NIBP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Cyan

CO2 Color

The CO2 Color parameter allows you to specify the color of the CO_2 indicator and waveform on the X Series monitor.

The values for the CO2 Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Magenta

Resp Color

The Resp Color parameter allows you to specify the color of the Resp indicator on the X Series monitor.

The values for the Resp Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Magenta

Temp Color

The Temp Color parameter allows you to specify the color of the Temp indicator on the X Series monitor.

The values for the Temp Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	White

IBP Source P1 Color

The IBP Source P1 Color parameter allows you to specify the color of the IBP Source P1 indicator on the X Series monitor.

The values for the IBP Source P1 Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Red

IBP Source P2 Color

The IBP Source P2 Color parameter allows you to specify the color of the IBP Source P2 indicator on the X Series monitor.

The values for the IBP Source P2 Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Cyan

IBP Source P3 Color

The IBP Source P3 Color parameter allows you to specify the color of the IBP Source P3 indicator on the X Series monitor.

The values for the IBP Source P3 Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	White

IBP Source ABP Color

The IBP Source ABP Color parameter allows you to specify the color of the IBP Source ABP indicator on the X Series monitor.

The values for the IBP Source ABP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Green

IBP Source ART Color

The IBP Source ART Color parameter allows you to specify the color of the IBP Source ART indicator on the X Series monitor.

The values for the IBP Source ART Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Red

IBP Source AO Color

The IBP Source AO Color parameter allows you to specify the color of the IBP Source AO indicator on the X Series monitor.

The values for the IBP Source AO Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Yellow

IBP Source CVP Color

The IBP Source CVP Color parameter allows you to specify the color of the IBP Source CVP indicator on the X Series monitor.

The values for the IBP Source CVP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Cyan

IBP Source ICP Color

The IBP Source ICP Color parameter allows you to specify the color of the IBP Source ICP indicator on the X Series monitor.

The values for the IBP Source ICP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	White

IBP Source LAP Color

The IBP Source LAP Color parameter allows you to specify the color of the IBP Source LAP indicator on the X Series monitor.

The values for the IBP Source LAP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Yellow

IBP Source PAP Color

The IBP Source PAP Color parameter allows you to specify the color of the IBP Source PAP indicator on the X Series monitor.

The values for the IBP Source PAP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Yellow

IBP Source RAP Color

The IBP Source RAP Color parameter allows you to specify the color of the IBP Source RAP indicator on the X Series monitor.

The values for the IBP Source RAP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Blue

IBP Source UAP Color

The IBP Source UAP Color parameter allows you to specify the color of the IBP Source UAP indicator on the X Series monitor.

The values for the IBP Source UAP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Red

IBP Source UVP Color

The IBP Source UVP Color parameter allows you to specify the color of the IBP Source UVP indicator on the X Series monitor.

The values for the IBP Source UVP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Blue

IBP Source BAP Color

The IBP Source BAP Color parameter allows you to specify the color of the IBP Source BAP indicator on the X Series monitor.

The values for the IBP Source BAP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Red

IBP Source FAP Color

The IBP Source FAP Color parameter allows you to specify the color of the IBP Source FAP indicator on the X Series monitor.

The values for the IBP Source FAP Color parameter are:

Possible Values:	Green, Blue, Yellow, Red, White, Magenta, Cyan
Default:	Green

Device Info

The following options allows you to set specific information on the X Series unit upon purchase.

Unit ID

The Unit ID parameter allows you to set a unique identification number for the X Series unit.

The values for the Unit ID parameter are:

Possible Values:	Alphanumeric
Default:	<blank>

Department Name

The Department Name parameter allows you to set the name of the department using the X Series unit.

The values for the Department Name parameter are:

Possible Values:	Alphanumeric
Default:	<blank>

Contact Telephone

The Contact Telephone parameter allows you to set the telephone number of a contact for the user of the X Series unit.

The values for the Contact Telephone parameter are:

Possible Values:	Alphanumeric
Default:	<blank>

Display Setup

The following options allow you to set values related to display.

Display FiCO2

The Display FiCO2 parameter allows you to enable or disable FiCO2 monitoring.

The values for the Display FiCO2 parameter are:

Possible Values:	No, Yes
Default:	No

Screen Cycle Display Formats

This Screen Cycle Display Formats parameter allows you to set the screen cycle display

The values for the Screen Cycle Display Formats parameter are:

Possible Values:	All Available, Skip Large Numerics
Default:	All Available

Top Trace Default ECG Lead

The Top Trace Default ECG Lead parameter allows you to set the default ECG Lead cable for the top trace.

The values for the Top Trace Default ECG Lead parameter are:

Possible Values:	Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
Default:	Pads

Auto ECG Lead

The Auto ECG Lead parameter allows you to automatically display in the top trace the desired ECG leads when connected. This parameter is only available when Top Trace Default ECG Lead is set to Pads.

When the X Series unit is turned on and a new case is created, the Auto ECG Lead feature will display Pads in the top trace by default. If an ECG connection to a patient is detected before a Pads patient connection, the top trace will be changed to the ECG lead selected in the Auto ECG Lead field. When an ECG connection to a patient is detected and the lead selected by the Auto ECG Lead field is not available, the selected lead will be displayed. This operation is only performed once for the duration of a case.

The values for the Auto ECG Lead parameter are:

Possible Values:	Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
Default:	II

Default ECG Leads

The Default ECG Lead parameter allows you to select up to 3 additional traces to display on startup, if no other monitoring devices are attached.

The second and third default ECG lead selections are grayed out and set to Not Assigned until the first default ECG lead section field is set to a specific lead. Setting one of the Default ECG Lead to Not Assigned will automatically reset all of the lower priority selections to Not Assigned.

The values for Default ECG Leads parameters are:

First Default Lead	
Possible Values:	Not Assigned, Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
Default:	Not Assigned

Second Default Lead	
Possible Values:	Not Assigned, Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
Default:	Not Assigned

Third Default Lead	
Possible Values:	Not Assigned, Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
Default:	Not Assigned

Enable NVG Mode

The Enable NVG Mode parameter allows you to enable or disable night vision goggle Mode.

The values for the Enable NVG Mode parameter are:

Possible Values:	No, Yes
Default:	No

Supervisor Code

The Supervisor Code parameter allows you to set the Supervisor Code needed to access the Supervisor Menu.

The values for the Supervisor Code parameter are:

Possible Values:	Numeric
Default:	Contact the Zoll Technical Support Department if you do not have the default supervisor code.

Log Clear Code

The Log Clear Code parameter allows you to set a user confirmation or a user confirmation and supervisor code to clear the disclosure log file.

Log Clear Restriction

If you set this parameter to **User confirmation** the user will be prompted with a confirmation dialog before clearing the disclosure log. If you set this parameter to **Passcode** the user will have to enter a passcode and then be prompted with a confirmation dialog before clearing the disclosure log.

The values for the Log Clear Restriction parameter are:

Possible Values:	User confirmation, Passcode
Default:	User confirmation

Log Clear Code

The values for the Log Clear Code parameter are:

Possible Values:	Numeric
Default:	1234

AED/Advisory Parameters

The AED/Advisory parameters allow you to view and modify functions related to using the X Series unit for automatic external and advisory defibrillation. The main level parameters in this menu include:

- General
- Energy Protocol
- AED Mode

General

The following options allow you to set basic AED functions.

Power Up Mode

The Power Up Mode parameter allows you to set the mode in which the unit starts, or powers up.

The values for the Power Up Mode parameter are:

Possible Values:	Manual, AED
Default:	Manual

Restart Analysis After CPR

When this parameter is set to Yes, the analysis starts automatically after the CPR interval following each stacked shock sequence. Analyses do not automatically restart after a CPR interval following No Shock Advised results. When this parameter is set to No, the PRESS ANALYZE message is displayed, but the analysis does not restart.

Note: When the Power Up Mode parameter is set to Manual, this parameter is disabled.

The values for the Restart Analysis After CPR parameter are:

Possible Values:	Yes, No
Default:	No

Manual Mode Analysis

The Manual Mode Analysis parameter allows you to set the form of Manual Mode Analysis.

The values for the Manual Mode Analysis parameter are:

Possible Values:	Single Analysis, Analysis/CPR Protocol
Default:	Single Analysis

Enable Voice Prompts

The Enable Voice Prompts parameter allows you to specify when to use voice prompts.

The values for the Enable Voice Prompts parameter are:

Possible Values:	Always, AED Mode Only
Default:	Always

Disarm Timeout

The Disarm Timeout parameter allows you to set the time to disarm AED.

The values for the Disarm Timeout parameter are:

Possible Values:	30 sec, 60 sec
Default:	30 sec

CPR Time

The CPR Time parameter allows you to set the CPR time.

The values for the CPR Time parameter are:

Possible Values:	1 min, 1.5 min, 2 min, 2.5 min, 3 min, 3.5 min, 4 min
Default:	2 min

CPR Message After “No Shock Advised”

The CPR Message After “No Shock Advised” parameter allows you to set the message given after the “No Shock Advised” message.

The values for the CPR Message After “No Shock Advised” parameter are:

Possible Values:	Perform CPR, If No Pulse, Perform CPR
Default:	Perform CPR

CPR Message After Shock Delivered

The CPR Message After Shock Delivered parameter allows you to set the message given after the shock is delivered.

The values for the CPR Message After Shock Delivered parameter are:

Possible Values:	Perform CPR, If No Pulse, Perform CPR
Default:	Perform CPR

Energy Protocol

The following options allow you to set the energy levels of the shocks given.

Adult Shock 1 Energy

The Adult Shock 1 Energy parameter allows you to set the energy level of the first shock given for adult patients.

The values for the Adult Shock 1 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	120 J

Adult Shock 2 Energy

The Adult Shock 2 Energy parameter allows you to set the energy level of the second shock given for adult patients.

The values for the Adult Shock 2 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	150 J

Adult Shock 3 Energy

The Adult Shock 3 Energy parameter allows you to set the energy level of the third shock given for adult patients.

The values for the Adult Shock 3 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	200 J

Pediatric Shock 1 Energy

The Pediatric Shock 1 Energy parameter allows you to set the energy level of the first shock given for pediatric patients.

The values for the Pediatric Shock 1 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	50 J

Pediatric Shock 2 Energy

The Pediatric Shock 2 Energy parameter allows you to set the energy level of the second shock given for pediatric patients.

The values for the Pediatric Shock 2 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	70 J

Pediatric Shock 3 Energy

The Pediatric Shock 3 Energy parameter allows you to set the energy level of the third shock given for pediatric patients.

The values for the Pediatric Shock 3 Energy parameter are:

Possible Values:	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
Default:	85 J

AED Mode

The following options allow you to set specific functions of the AED Mode.

Begin with CPR

The Begin with CPR parameter allows you to specify whether or not to begin with CPR.

The values for the Begin with CPR parameter are:

Possible Values:	No, Yes
Default:	No

Manual Mode Restriction

The Manual Mode Restriction parameter allows you to set the restriction for entering Manual Mode.

The values for the Manual Mode Restriction parameter are:

Possible Values:	User Conformation, Passcode
Default:	User Conformation

Manual Mode Passcode

The Manual Mode Passcode parameter allows you to set the Manual Mode Passcode.

The values for the Manual Mode Passcode parameter are:

Possible Values:	Numeric
Default:	

NIBP Monitoring

The NIBP Monitoring parameter allows you to enable or disable NIBP monitoring during AED.

The values for the NIBP Monitoring parameter are:

Possible Values:	Disable, Enable
Default:	Disable

CO2 Monitoring

The CO2 Monitoring parameter allows you to enable or disable CO2 monitoring during AED.

The values for the CO2 Monitoring parameter are:

Possible Values:	Disable, Enable
Default:	Disable

SpO2 Monitoring

The SpO2 Monitoring parameter allows you to enable or disable SpO2 monitoring during AED.

The values for the SpO2 Monitoring parameter are:

Possible Values:	Disable, Enable
Default:	Disable

Temperature Monitoring

The Temperature Monitoring parameter allows you to enable or disable temperature monitoring during AED.

The values for the Temperature Monitoring parameter are:

Possible Values:	Disable, Enable
Default:	Disable

12-Lead Monitoring

The 12-Lead Monitoring parameter allows you to enable or disable 12-Lead monitoring during AED.

The values for the 12-Lead Monitoring are:

Possible Values:	Disable, Enable
Default:	Disable

Allow User to End CPR to Analyze

The Allow User to End CPR to Analyze parameter allows you to specify whether or not to end CPR in order to analyze.

The values for the Allow User to End CPR to Analyze parameter are:

Possible Values:	No, Yes
Default:	Yes

CPR Parameters

The CPR parameters allow you to view and modify functions related to using the X Series unit for CPR. The main level parameters in this menu include:

- AHA/ERC Guidelines
- CPR Time
- Enable Metronome
- Constant Metronome
- Enable CPR Prompts
- Display “Fully Release” Prompt
- Log CPR Metrics
- Auto Display Compression Trace

AHA/ERC Guidelines

The AHA/ERC Guidelines parameter allows you to specify which edition of the AHA/ERC Guidelines the X Series unit follows.

The values for the AHA/ERC Guidelines parameter are:

Possible Values:	2005, 2010
Default:	2010

CPR Time

The CPR Time parameter allows you to set the CPR time.

The values for the CPR Time parameter are:

Possible Values:	1 min, 1.5 min, 2 min, 2.5 min, 3 min, 3.5 min, 4 min
Default:	2 min

Enable Metronome

This parameter allows you to select which modes you want the CPR metronome enabled: Never (no modes), Always (Manual, Advisory/CPR Protocol, and AED modes), and AED Mode Only. This parameter works in conjunction with the Constant Metronome parameter, and the mode in which the unit is operating determines how these parameters function together. The following paragraphs and Table 4-1, “CPR Metronome Activity,” on page 145 provide more detailed information.

Enable Metronome Set to Never

The metronome is disabled in all modes.

Enable Metronome Set to Always

When Enable Metronome is set to Always and Constant Metronome is Enabled, the metronome is on when CPR is detected, and off when CPR is idle in all modes.

When Enable Metronome is set to Always and Constant Metronome is Disabled:

- Manual Mode and Advisory/CPR Protocol Mode -- Metronome is only on compressions when compressions are less than 80 per minute during CPR.
- AED Mode -- Metronome is on at the start of CPR period.

Enable Metronome Set to AED Mode Only

When Enable Metronome is set to AED Mode Only and Constant Metronome is Enabled:

- Manual Mode Advisory/CPR Protocol Mode- No metronome.
- AED Mode -- Metronome is on when CPR is detected, and off when CPR is idle.

When Enable Metronome is set to AED Mode Only and Constant Metronome is Disabled:

- Manual Mode Advisory/CPR Protocol Mode-- No metronome.
- AED Mode -- Metronome is on at the start of CPR period.

The values for the Enable Metronome parameter are:

Possible Values:	Never, Always, AED Mode Only
Default:	Never

Table 4-1: CPR Metronome Activity

Enable Metronome Setting	AED Mode	Advisory/CPR Protocol Mode	Manual Mode
Constant Metronome Enabled			
AED Mode Only	On when CPR detected Off when CPR Idle	Off	Off
Always	On when CPR detected Off when CPR Idle	On when CPR detected Off when CPR Idle	On when CPR detected Off when CPR Idle
Never	Off	Off	Off
Constant Metronome Disabled			
AED Mode Only	On at start of CPR period	Off	Off
Always	On at start of CPR period	On only at <80 compressions per minute	On only at <80 compressions per minute
Never	Off	Off	Off

Constant Metronome

This parameter allows you to enable or disable the constant metronome. This parameter works in conjunction with the Enable Metronome parameter, and the mode in which the unit is operating (Manual, Advisory/CPR Protocol, or AED) determines how these parameters function together. When the Enabled Metronome parameter is set to Never, Constant Metronome is disabled. The following paragraphs and Table 4-1, "CPR Metronome Activity," on page 145 provide more detailed information.

Constant Metronome Enabled

When Constant Metronome is Enabled and Enable Metronome is set to Always, the metronome is on when CPR is detected, and off when CPR is idle in all modes.

When Constant Metronome is Enabled and Enable Metronome is set to AED Mode Only:

- Manual Mode and Advisory/CPR Protocol Mode -- No metronome.
- AED Mode -- Metronome is on when CPR is detected, and off when CPR is idle.

Constant Metronome Disabled

When Constant Metronome is Disabled and Enable Metronome is set to Always:

- Manual Mode and Advisory/CPR Protocol Mode-- Metronome is only on when compressions are less than 80 per minute during CPR.
- AED Mode -- Metronome is on at the start of CPR period.

When Constant Metronome is Disabled and Enable Metronome is set to AED Mode Only:

- Manual Mode and Advisory/CPR Protocol Mode-- No metronome.
- AED Mode -- Metronome is on at the start of CPR period.

The values for the Constant Metronome parameter are:

Possible Values:	Enabled, Disabled
Default:	Disabled

Enable CPR Prompts

The Enable CPR Prompts parameter allows you to specify what CPR prompts are used. CPR prompts are only available when using Adult CPR electrodes.

The values for the Enable CPR Prompts parameter are:

Possible Values:	Text and Voice, Text Only
Default:	Text and Voice

Display “Fully Release” Prompt

The Display “Fully Release” Prompt parameter allows you to enable or disable the “Fully Release” prompt. The “Fully Release” text prompt is only available when using Adult CPR electrodes.

The values for the Display “Fully Release” Prompt parameter are:

Possible Values:	No, Yes
Default:	Yes

Log CPR Metrics

The Log CPR Metrics parameter allows you to specify whether or not to log CPR metrics.

The values for the Log CPR Metrics parameter are:

Possible Values:	No, Yes
Default:	Yes

Auto Display Compression Trace

This parameter allows you to enable or disable the CPR Compression Bar Graph. When this parameter is enabled (set to Yes), the CPR Compression Bar Graph automatically displays when compressions are detected. The CPR Compression Bar Graph is only available when using Adult CPR electrodes.

The values for the Auto Display Compression Trace parameter are:

Possible Values:	Yes, No
Default:	Yes

Communications Parameters

The Communication parameters allow you to view and modify functions related to unit communications. The main level parameters in this menu include:

- Wireless
- Bluetooth
- Wi-Fi
- Cellular
- Ethernet
- 12-Lead Reports
- Disclosure Log

Wireless

The Wireless parameter allows you to enable or disable wireless communications.

Note: Disabling Wireless turns off all internal wireless capabilities, i.e., Wi-Fi and Bluetooth.

The values for the Wireless parameter are:

Possible Values:	Disabled, Enabled
Default:	Enabled

Bluetooth

The Bluetooth parameter allows you to enable or disable Bluetooth communications.

Note: This feature must be configured prior to use.

The values for the Bluetooth parameter are:

Possible Values:	Disabled, Enabled
Default:	Enabled

Wi-Fi

The WiFi parameter allows you to enable or disable WiFi communications, and if enabled, to configure access profiles.

Note: This feature must be configured prior to use.

The values for the WiFi parameter are:

Possible Values:	Disabled, Enabled
Default:	Enabled
If enabled:	Configure

Power Management

The Power Management parameter allows you to enable/disable Wi-Fi power management. This parameter is located within the Configure Wi-Fi menu; to access, select Configure in the Wi-Fi parameter section when enabled.

Note: This parameter is only applicable to X Series units with CP version 02.08.011.4084 and MP/PP version 02.18.03.00 or higher.

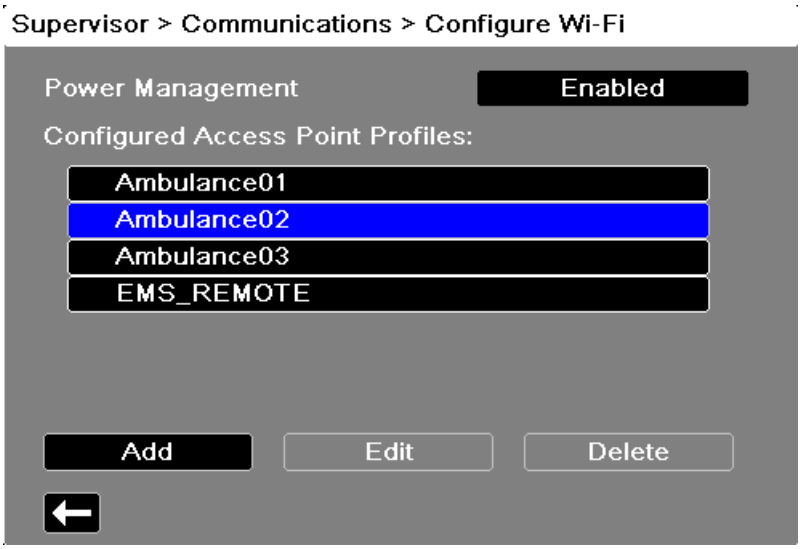
The values of the Power Management parameter are:

Possible Values:	Disabled, Enabled
Default:	Enabled

Configuring Access Point Profiles

To configure Wi-Fi Access Point Profiles:

1. Use the navigation keys to highlight and select **Wi-Fi Configure**. The Configure Wi-Fi dialog box displays.



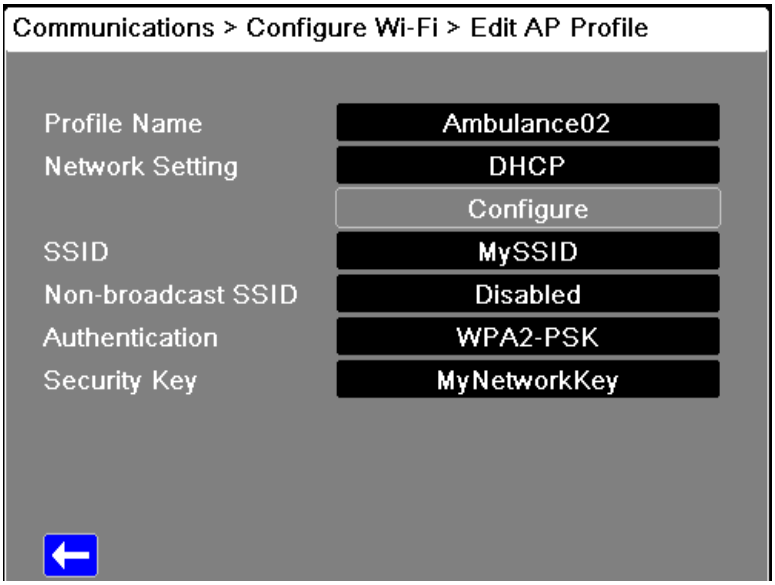
Note: Selecting a profile in the list allows to edit or delete the profile. It does not make a profile the active Wi-Fi profile selection.

2. If you would like to delete an existing profile use the navigation keys to select the desired profile (a green check mark identifies a selected profile) then navigate to and select **Delete**.

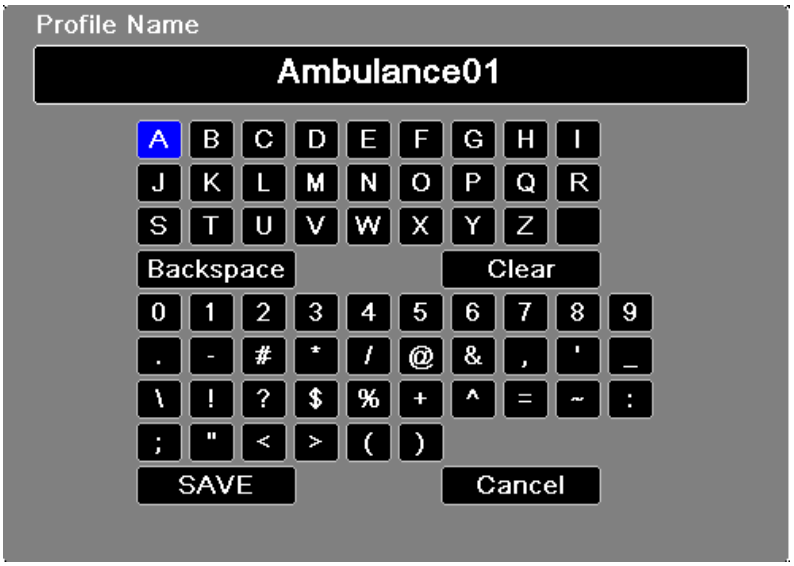
   After deleting a file, be sure to review the defined Wi-Fi profiles and update any which referred to the deleted file.

3. If you would like to:
   - Edit a profile use the navigation keys to select the profile (a green check mark identifies a selected profile) then navigate to and select **Edit**.
   - Add a new Access Point Profile, use the navigation keys to highlight and select **Add.**

   The Edit AP Profile dialog box displays.

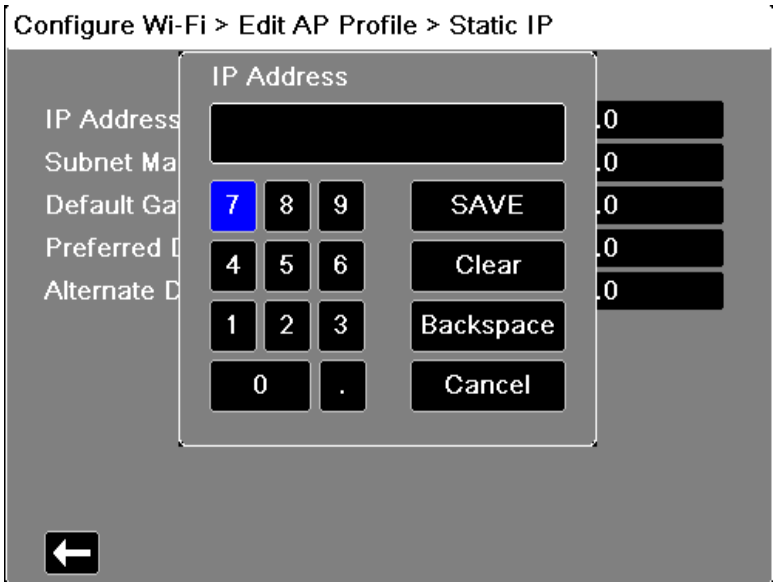


4. Enter a new or modify an existing profile name by navigating to and selecting **Profile Name**. The Profile Name dialog displays. Use the alphabetical keypad and quick access keys to enter the profile name then press **SAVE**. You can press **Cancel** to return to the Configure Wi-Fi menu without saving changes.



5. Specify whether this profile is either DHCP or a Static IP by using the navigation keys to select **Network Setting** then choosing either **DHCP** or **Static IP** as appropriate.

6. If you selected Static IP, navigate to and select **Network Setting > Configure**. The Configure Static IP dialog displays. Use the numeric keypad to enter values for the IP Address, Subnet Mask, Default Gateway, Preferred DNS Server, and Alternate DNS Server then press **Save**.



7. Provide the SSID name by navigating to and selecting **SSID**. The SSID dialog box displays. Use the alphabetical keypad and quick access keys to enter the SSID name then press **SAVE**.

8. Navigate to and select **Non-broadcast SSID** then specify whether to enable or disable connection to non-broadcast or hidden SSIDs by selecting **Enabled** or **Disabled** as appropriate. For Wi-Fi networks configured not to broadcast their SSID, you must set this field to **Enabled** in order to allow the X-Series unit to connect to the Wi-Fi network.

9. Navigate to and select **Authentication** then select the authentication type. The X Series unit supports three types of Wi-Fi authentication; WPA-PSK (Wi-Fi Protected Access, Pre-shared key), WPA2-PSK (Wi-Fi Protected Access II, Pre-shared key), and Enterprise.

If you choose	Then
WPA-PSK or WPA2-PSK	You must provide a security key. Navigate to and select **Security Key.** The Security Key dialog displays. Enter a 8-64 character security key by using the alphabetical keypad then press **SAVE**
Authentication	Further configuration is required. Use the navigation keys to select **Enterprise Settings** then select **Configure.** The Enterprise Config dialog displays. Provide the Identity, CA certificate (optional for PEAP), and Authentication Protocol (TLS or PEAP). Some fields will be grayed out, depending on the Authentication Protocol that you choose. • If you select PEAP (Protected Extensible Authentication Protocol), you must enter the Password corresponding to the Identity entered. If the network requires it, you may enter an Anonymous Identity. The CA certificate is also optional. The X Series unit only supports PEAPv0/v1 + MSCHAPV2 • If you select TLS (Transport Layer Security), you must select a Client Certificate and enter the Private Key Password corresponding to the private key in the Certificate file. • For all certificates and keys, you can choose from a list of pre-loaded files. The X Series unit only supports PFX format client certificates. To load a new certificate from a USB device: 1. Select **Manage Certificates & Keys**. A list of existing certificates displays. 2. Select **Load from USB**. A list of files on the USB device displays. Filenames can only be 24 characters long. Filenames longer than 24 characters will not appear in the list. 3. Use the arrow keys to select the desired file then select **Load Selected**. Only one file can be selected at a time. 4. After pressing **Load Selected,** press the back arrow (⮌) to view the list of all currently loaded certificates and keys. 5. Press ⮌ to return to the Enterprise Config menu, and ⮌ again to return to the Add Access Point Profile menu.

10. When finished adding or editing WiFi profiles, press the back arrow (⮌) to return to the list of configured access point profiles. Press ⮌ to return to the Communications menu.

Cellular

The Cellular parameter allows you to perform the configuration of cellular connectivity. This includes Bluetooth phone pairing operations, setup for cellular service providers, and selections for USB cellular modem usage.

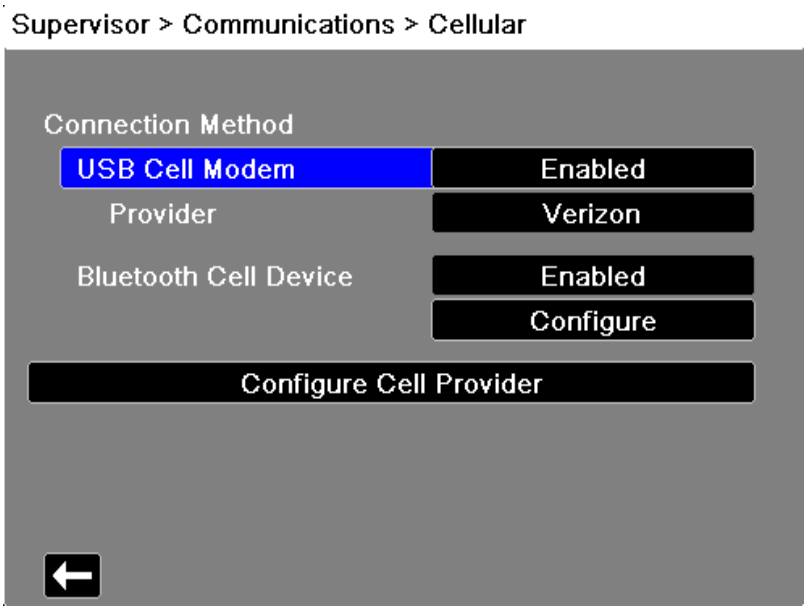
Note: This feature must be configured prior to use.

The values for the Cellular parameter are:

If Enabled:	Configure

You can configure your USB cellular modem or Bluetooth device to work with the X Series unit.

Under the Communications menu, select **Cellular Configure.** The Cellular menu appears.



You can use the arrow keys to enable or disable all cellular functions, and configure your cell phone provider information.

Configuring Cell Phone Provider Information

You can create up to three cell phone providers. Use the arrow keys to enter information about your cell phone provider:

- **Provider Name**

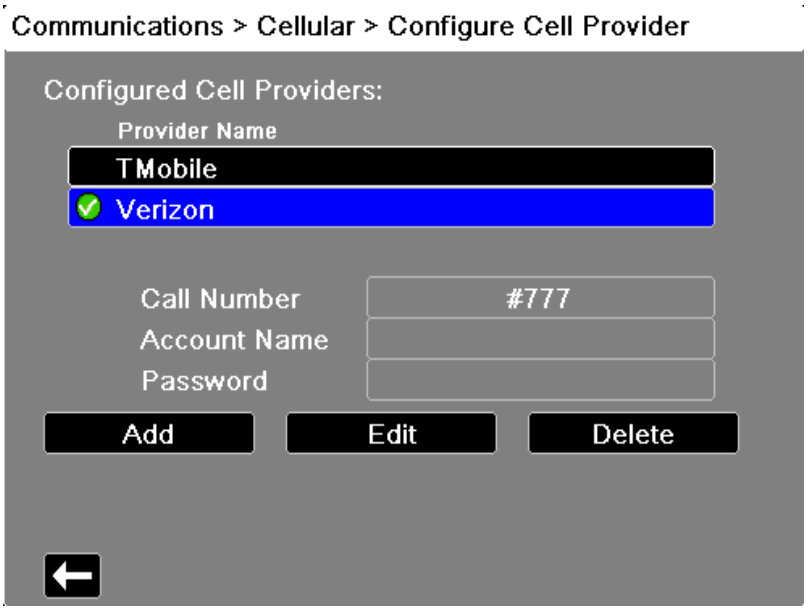
  Provider name is an identifier you choose to refer to this cell phone provider.

- **Call Number**

  Call number is an access number sometime referred to as a Dial String.

- **Account Name and Password**

  Some providers require an account name and password. If your provider does not require these fields, leave them blank.

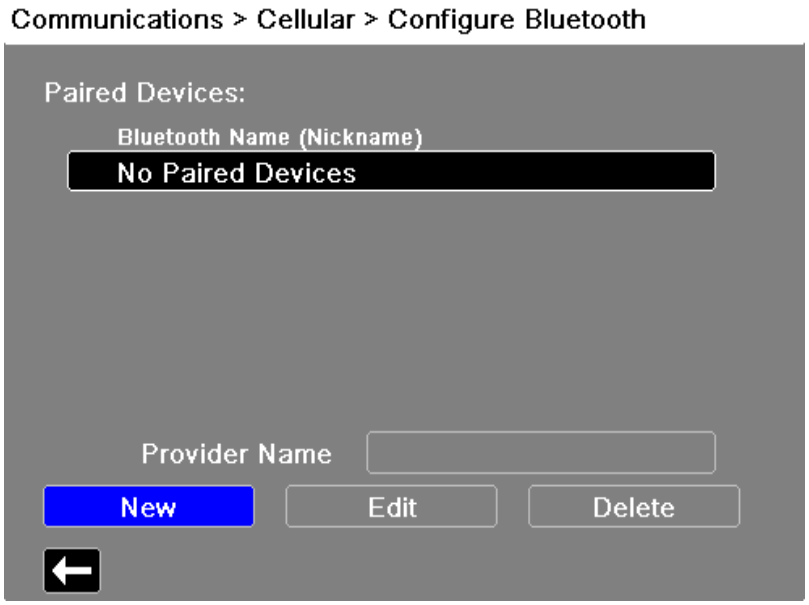


Configuring and Pairing Bluetooth Devices

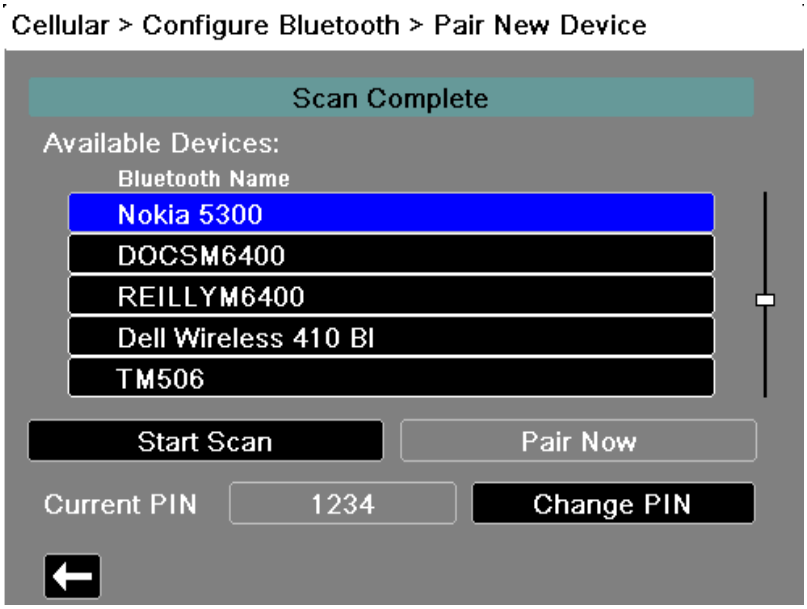
Use Bluetooth devices with DUN or PAN-NAP profiles only. Not all cellular phones transmit reliably; contact your local ZOLL Medical Corporation sales representative for a list of approved devices.

To pair a Bluetooth device:

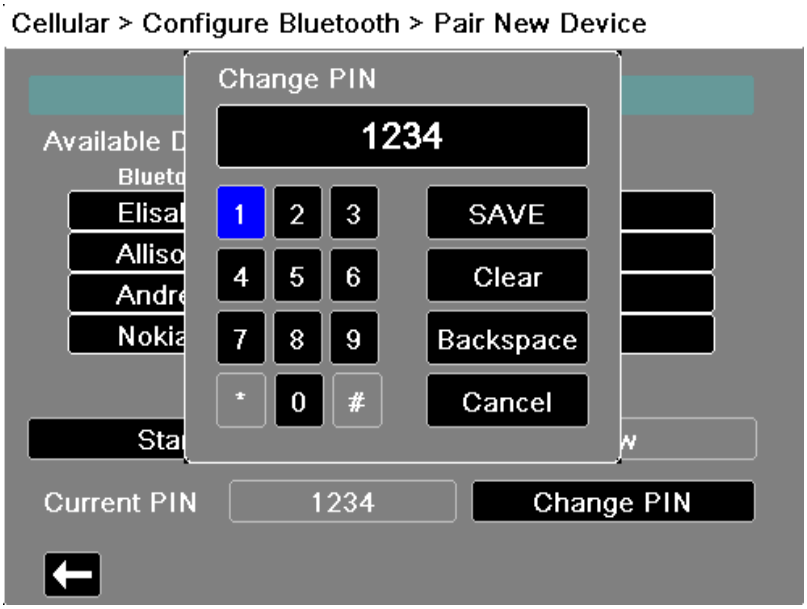
1. Select **Bluetooth Cell Device Configure** in the Cellular menu.
2. Use the navigation keys and select **New**. The unit scans for and lists nearby Bluetooth devices that are in discoverable mode.



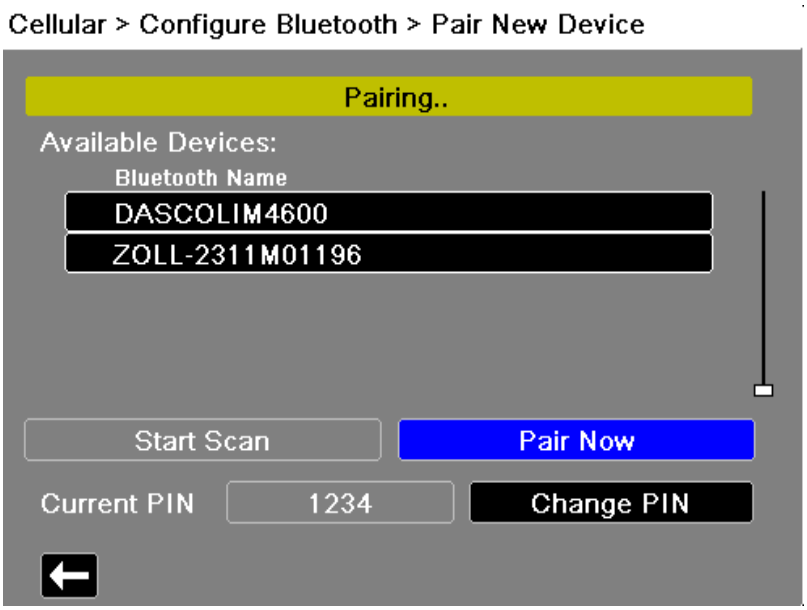
3. Use the navigation keys to select the desired device. A green check mark indicates which device has been selected.



4. It may be necessary to change the PIN on the X Series unit. Check your device's documentation. To change the PIN, select **Change Pin** in the Pair New Device menu, then use the numerical keypad to enter the desired PIN.

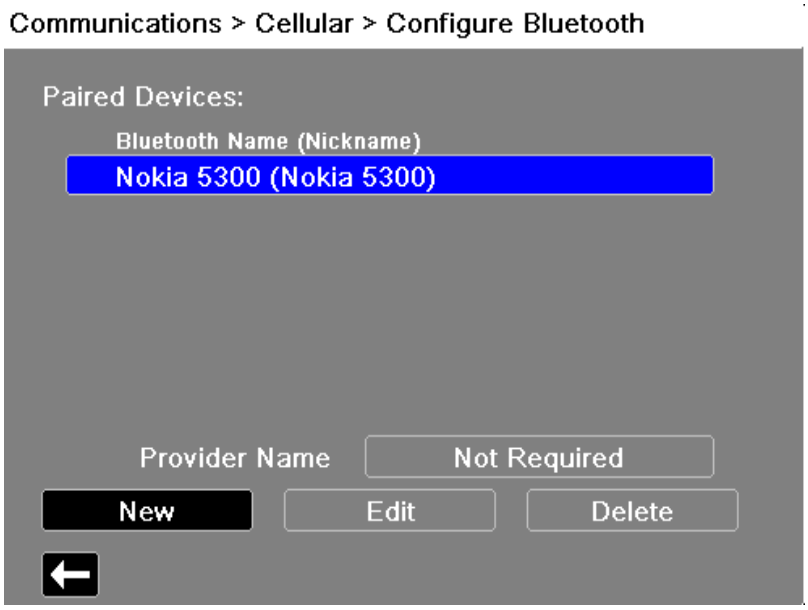


5. Select **Pair Now** to pair the device.



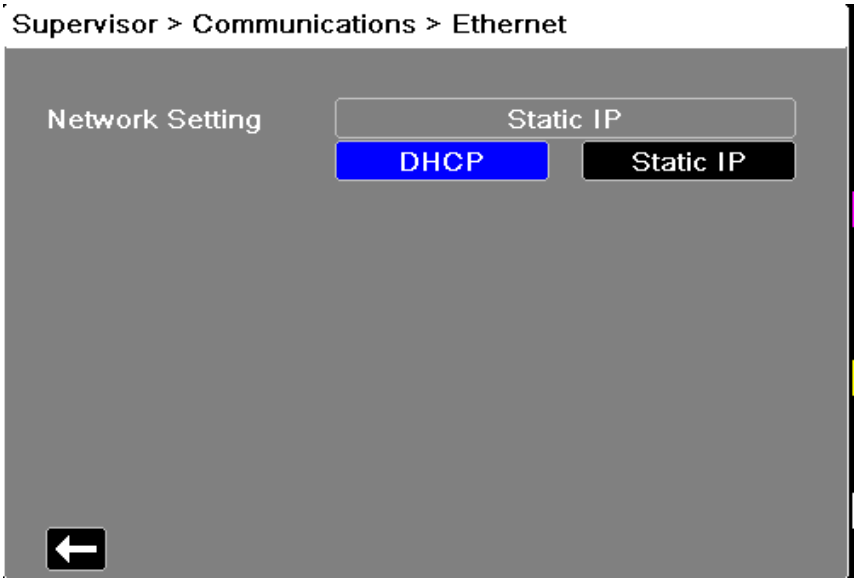
6. On your Bluetooth device, accept the pairing request and enter the PIN, if prompted. The X Series unit then returns to the list of paired devices.

7. You can then edit the settings of the paired device by selecting **Edit** and giving the device an optional nickname or setting the provider. A provider is not required for Bluetooth devices using the PAN-NAP profile. Press the back arrow ( ) to return to the list of paired devices.

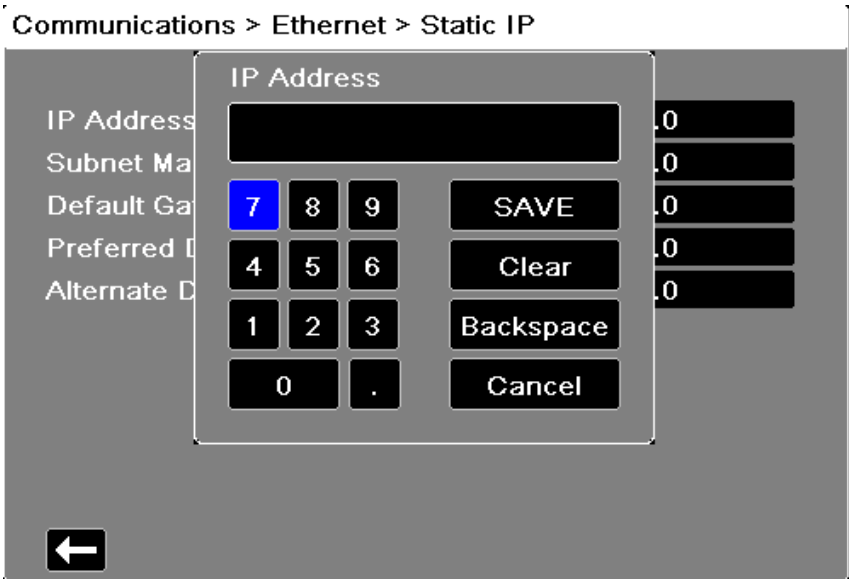


Ethernet

You can use an Ethernet adapter to transfer data to a PC via an Ethernet cable. In the Communications menu, select **Ethernet Configure**.



Use the navigation keys to select either DHCP or Static IP. If you select Static IP, use the numeric keypad to enter values for the IP Address, Subnet Mask, Default Gateway, Preferred DNS Server, and Alternate DNS Server.



12-Lead Reports

The Reports parameter allows you to configure the sending of 12-Lead reports. This includes configuring the RescueNet® report server as well as customer account credentials.

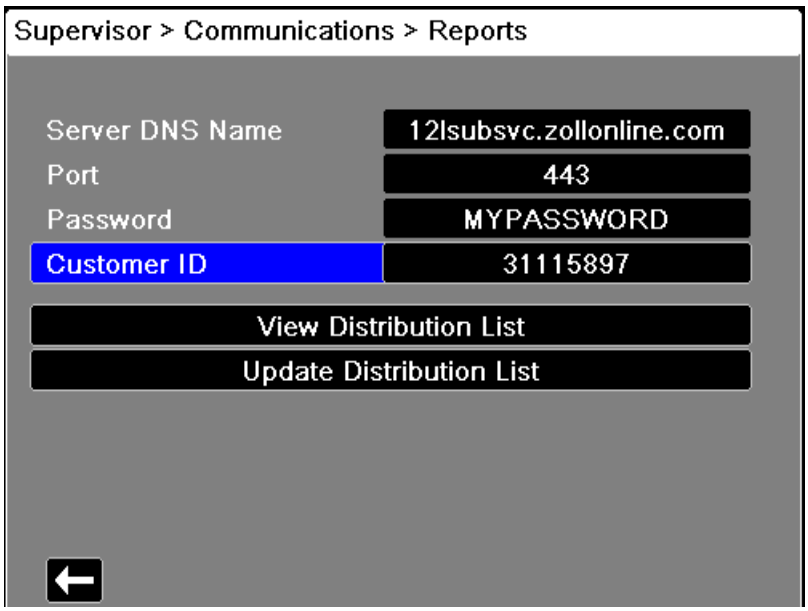
Note: This feature must be configured prior to use.

The values for the Reports parameter are:

If Enabled:	Configure

The X Series unit can send 12-lead reports to the ZOLL RescueNet software. Distribution List entries defined in your RescueNet account specify possible report destinations, each of which consists of one or many recipients such as email addresses and fax machines. You must have a RescueNet account set up before you can complete configuration of the X-Series device.

1. In the Communications menu, select **12-Lead Reports Configure**.



2. Enter your **RescueNet Customer ID** and **Password** in the fields provided.
3. Before you can transmit 12-lead reports, you must download the current Distribution List for your account from the RescueNet server. If you have already configured your wireless preferences, you can use the **Update Distribution List** button to complete the download.
4. The X-Series retains the current Distribution List until a new one is downloaded. If you modify the Distribution List entries using RescueNet, you should download a new copy to the X Series device.

Disclosure Log

The Disclosure Log parameter allows you to configure the remote server to which to wirelessly send case disclosure logs.

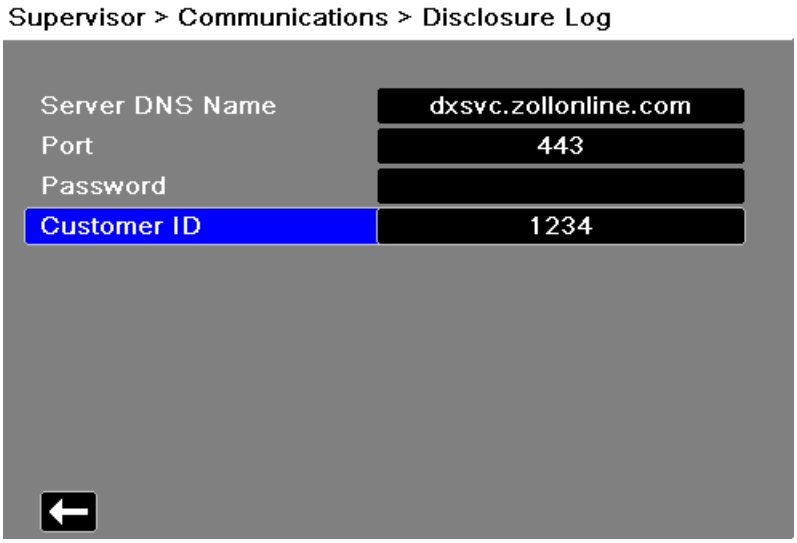
Note: This feature must be configured prior to use.

The values for the Disclosure Log parameter are:

If Enabled:	Configure

To configure the remote server:

1. Under the Communications menu, select **Disclosure Log >Configure.** The Disclosure Log menu displays.



2. In the **Server DNS Name** field, enter the host name of the remote server to which to send the Log data.
3. Enter the **Port** to be used to connect to the server.
4. Enter your associated **Password** and **Customer ID** in the fields provided.
5. When you are done entering data, press the back arrow ( ) to return to the Supervisor>Communications menu.

Service Parameters

The Service parameters allow you to view and modify functions related to maintenance of the X Series unit. The main level parameters in this menu include:

- Device Tests
- Device Configuration
- Update/Upgrade
- Diagnostic
- Device Monitoring
- Research Options
- Service Code

Device Tests

The Device Tests are to be used to ensure that the X Series unit is operating at optimal efficiency.

Possible Tests:	Keypad Test, LED Test, LCD Test, RFU Indicator Test, Audio Test, Printer Test, Battery Test, Fan Test, NIBP Test, USB Test

Device Configuration

The Device Configuration displays technical information about the X Series unit and its external equipment.

Update/Upgrade

The Update/Upgrade options allows you to make needed modifications to the X Series unit to keep it up to date.

Diagnostic

The following options allow you to set and view information on the X Series unit's performance.

ECG

The following options control values related to ECG diagnostics.

General>Resp Breath Marker

The Resp Breath Marker parameter allows you to enable or disable Resp Breath Marker.

The values for the Resp Breath Marker parameter are:

Possible Values:	On, Off
Default:	Off

Error Counts

This displays the number of ECG errors made by the unit.

NIBP

The following displays information related to NIBP diagnostics.

General

This displays basic information on the unit's NIBP equipment and software.

Calibration Info

This displays information on the unit's calibration software.

Reading Counts

This displays the number of readings related to NIBP monitoring.

Cycle/Error Counts

This display the number of errors related to NIBP monitoring.

NIBP Test

This allows you to test the NIBP system.

CO2

This displays information related to CO2 diagnostics.

SpO2

The following displays information related to SpO2 diagnostics.

Version Info

This displays technical SpO2 information on the current version of the X Series unit.

Error Counts

This displays the number of SpO2 errors made by the unit.

Temp/IBP

This displays information related to Temp/IBP diagnostics.

Error Counts

This displays the number of Temp/IBP errors made by the unit.

Defib/Pacer

The following displays information related to Defib/Pacer diagnostics.

Version Info

This displays technical Defib/Pacer information on the current version of the X Series unit.

Cycle Counts

This displays the number of cycles made by the unit.

Error Counts

This displays the number of Defib/Pace errors made by the unit.

Device Monitoring

The Device Monitoring screen displays the number of time the X Series unit is used, the amount of time it has been on, and the number of times it went over temperature.

Research Options

The Waveform Recording Sample Rate parameter allows you to set the waveform recording sample rate.

Waveform Recording Sample Rate

The values for the Waveform Recording Sample Rate parameter are:

Possible Values:	250 Hz, 500 Hz
Default:	250 Hz

Service Code

The Service Code parameter allows you to set the Service Code.

The values for the Service Code parameter are:

Possible Values:	Numeric
Default:	

Appendix A

This appendix provides tables that show the range of configuration parameters and default values for the X Series.

This appendix includes tables containing configuration parameters for the following menus:

- **Setup Menu—**Contains setup configuration options such as HR/PR tone, print speed, and trend display format.
- **Parameter Menus—**Contain configuration options for HR/PR, NIBP, Resp, SpO2, Temp, and IBP.
- **Supervisor Menu—**These menus contain default settings for alarms, treatment options, defibrillator/pacer, ECG, NIBP, printer, display, AED, CPR, communications, and service. Accessible only to authorized users.

Setup Menu

The following table includes the parameter ranges and default values for the Setup menu:

Menu	Submenu	Parameter Name	Default Value	Parameter Values
Setup	ECG	Filter Response	Monitor	Limited, Monitor
		HR/PR Tone	On	On, Off
		Resp Monitoring	On	On, Off
		Resp Lead	Lead II (RA-LL	Lead I (RA-LA), Lead II (RA-LL)
		Patient Pace Marker	On	On, Off
		ECG Sweep Speed	25 mm/s	25 mm/s, 50 mm/s
	NIBP	NIBP Cuff Inflation Target	**Adult:** 160 **Pediatric:** 120 **Neonate:** 90	**Adult:** 120, 140, 160, 180, 200, 220, 240, 260 **Pediatric:** 80, 90, 100, 110, 120, 130, 140, 150 **Neonate:** 60, 70, 80, 90, 100, 110, 120, 130
	Display/Volume	Display Brightness	70%	10%, 20%. 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%
		HR/PR Tone	On	On, Off
		Volume	Medium	Low, Medium, High
	Printer	Print Speed	25 mm/s	25 mm/s, 50 mm/s
		Print Number of Traces	3	1, 2, 3, 4
		Print Grid	On	On, Off
		Print on Snapshot	Off	On, Off
		Print on Patient Alarm	Off	On, Off
		Print on NIBP	Off	On, Off
		Print on Trend	Off	On, Off
	Trends	Trend Display Format	NIBP	Resp, SpO_2, Temp, P1, P2, P3, NIBP
		Trend Display Interval	5 min	30 sec, 1 min, 5 min, 10 min, 15 min, 30 min, 60 min
		Trend on Alarm	Off	On, Off
	Operational Tests	Keypad Test		
		LED Test		
		LCD Test		
		RFU Indicator Test		
		Audio Test		
		Printer Test		
	Device Info	Application Version		
		Serial Number		
		Unit ID		
		Department Name		
		Contact Telephone		

Parameter Menus

The following table includes parameter ranges and default values for the Parameter menus:

Menu	Submenu	Parameter Name	Default Value	Parameter Values
HR/PR	HR/PR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 120 **Pediatric:** 150 **Neonate:** 200	32-300
		Lower Limit	**Adult:** 50 **Pediatric:** 50 **Neonate:** 100	30-300
		Extreme Brady/ Tachy Alarms	Tachy: +20 Brady: -10	Tachy: +5-+30 (by increments of 5) Brady: -5--30 (by increments of 5)
		LTA Monitoring	Off	On, Off
		HR/PR Tone	On	On, Off
		HR/PR Selected Source	ECG	ECG, SpO2, P1, P2, P3
		ECG Sweep Speed	25 mm/s	25 mm/s, 50 mm/s
NIBP	NIBP Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 220 **Pediatric:** 145 **Neonate:** 100	**Adult:** 32-260 **Pediatric:** 32-160 **Neonate:** 22-120
		Lower Limit	**Adult:** 75 **Pediatric:** 75 **Neonate:** 50	**Adult:** 30-258 **Pediatric:** 30-158 **Neonate:** 20-118
	NIBP Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 110 **Pediatric:** 100 **Neonate:** 70	**Adult:** 22-220 **Pediatric:** 22-130 **Neonate:** 12-110
		Lower Limit	**Adult:** 35 **Pediatric:** 35 **Neonate:** 30	**Adult:** 20-218 **Pediatric:** 20-128 **Neonate:** 10-108

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	NIBP MAP Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 120 **Pediatric:** 110 **Neonate:** 80	**Adult:** 25-230 **Pediatric:** 25-140 **Neonate:** 15-110
		Lower Limit	**Adult:** 50 **Pediatric:** 35 **Neonate:** 35	**Adult:** 23-228 **Pediatric:** 23-138 **Neonate:** 13-108
		NIBP Mode	Manual	Manual, Auto
		NIBP Auto Mode Interval	5 min	1 min, 2 min, 3 min, 5 min, 10 min, 15 min, 30 min, 60 min
		SmartCuf On/Off	On	On, Off
Resp	RR/BR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 50 **Pediatric:** 50 **Neonate:** 80	5-150
		Lower Limit	**Adult:** 3 **Pediatric:** 3 **Neonate:** 12	0-145
		No Breath Alarm	**Adult:** Off **Pediatric:** Off **Neonate:** Off	**Adult:** Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec **Pediatric:** Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec **Neonate:** Off, 10 sec, 15 sec, 20 sec
		Resp Monitoring	On	On, Off
		Resp Lead	Lead II (RA-LL)	Lead I (RA-LA), Lead II (RA-LL)
		CO2/Resp Sweep Speed	12.5 mm/s	3.13 mm/s, 6.25 mm/s, 12.5 mm/s

Menu	Submenu	Parameter Name	Default Value	Parameter Values
SpO2	SpO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 100 **Pediatric:** 100 **Neonate:** 95	52-100
		Lower Limit	85	50-98
	SpCO Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 10 **Pediatric:** 10 **Neonate:** 10	2-100
		Lower Limit	**Adult:** 0 **Pediatric:** 0 **Neonate:** 0	0-98
	SpMet Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 3.0 **Pediatric:** 3.0 **Neonate:** 3.0	2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0-100.0
		Lower Limit	**Adult:** 0.0 **Pediatric:** 0.0 **Neonate:** 0.0	0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0-98.0
	Averaging Time		8 seconds	4 seconds, 8 seconds, 16 seconds
	Sensitivity		Normal	Normal, Maximum
	HR/PR Tone		On	On, Off

Menu	Submenu	Parameter Name	Default Value	Parameter Values
Temp	T1 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	T2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	ΔT Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 5.0 °C: 2.8	°F: 0.2-90.0 °C: 0.2-50.0
		Lower Limit	°F: 0.0 °C: 0.0	°F: 0.0-89.8 °C: 0.0-49.8
		T1 Source Label	T1	T1, ART, CORE, ESOPH, RECT, SKIN, VEN, NASO
		T2 Source Label	T2	T2, ART, CORE, ESOPH, RECT, SKIN, VEN, NASO
IBP1	P1 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 220 **Pediatric:** 145 **Neonate:** 100	-28-300
		Lower Limit	**Adult:** 75 **Pediatric:** 75 **Neonate:** 50	-30-298
	P1 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 110 **Pediatric:** 100 **Neonate:** 70	-28-300
		Lower Limit	**Adult:** 35 **Pediatric:** 35 **Neonate:** 30	-30-298

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	P1 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 120 **Pediatric:** 110 **Neonate:** 80	-28-300
		Lower Limit	**Adult:** 50 **Pediatric:** 50 **Neonate:** 35	-30-298
		Source Label	P1	P1, ABP, AO, ART, BAP, CVP, FAP, ICP, LAP, PAP, RAP, UAP, UVP
		Display Format	S/D (M)	S/D (M), S/D, (M) S/D, (M)
IBP2	P2 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 220 **Pediatric:** 145 **Neonate:** 100	-28-300
		Lower Limit	**Adult:** 75 **Pediatric:** 75 **Neonate:** 50	-30-298
	P2 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 110 **Pediatric:** 100 **Neonate:** 70	-28-300
		Lower Limit	**Adult:** 35 **Pediatric:** 35 **Neonate:** 30	-30-298
	P2 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 120 **Pediatric:** 110 **Neonate:** 80	-28-300
		Lower Limit	**Adult:** 50 **Pediatric:** 50 **Neonate:** 35	-30-298
		Source Label	P2	P2, ABP, AO, ART, BAP, CVP, FAP, ICP, LAP, PAP, RAP, UAP, UVP
		Display Format	S/D (M)	S/D (M), S/D, (M) S/D, (M)

Menu	Submenu	Parameter Name	Default Value	Parameter Values
IBP3	P3 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 220 **Pediatric:** 145 **Neonate:** 100	-28-300
		Lower Limit	**Adult:** 75 **Pediatric:** 75 **Neonate:** 50	-30-298
	P3 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 110 **Pediatric:** 100 **Neonate:** 70	-28-300
		Lower Limit	**Adult:** 35 **Pediatric:** 35 **Neonate:** 30	-30-298
	P3 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	**Adult:** 120 **Pediatric:** 110 **Neonate:** 80	-28-300
		Lower Limit	**Adult:** 50 **Pediatric:** 50 **Neonate:** 35	-30-298
		Source Label	P3	P3, ABP, AO, ART, BAP, CVP, FAP, ICP, LAP, PAP, RAP, UAP, UVP
		Display Format	S/D (M)	S/D (M), S/D, (M) S/D, (M)

Supervisor Menu

The following table includes parameter ranges and default values for the Supervisor menu:

Menu	Submenu	Parameter Name	Default Value	Parameter Values
Alarms	General	Default Patient Mode	Adult	Adult, Pediatric, Neonate
		Volume	Medium	Low, Medium, High
		Audio Paused Time (Alarm Suspend Time)	4 min	Disable, 2 min, 4 min, 15 min, Always On
		Alarm Latching Enable	No	Yes, No
		Reminder Alarm	Disable	Enable, Disable
		Reminder Alarm Interval	5 min	5 min, 10 min, 15 min
	Default Adult>LTA Monitoring	LTA Monitoring	Off	On, Off
	Default Adult>HR/PR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	120	32-300
		Lower Limit	50	30-298
	Default Adult>NIBP Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	220	32-260
		Lower Limit	75	30-258
	Default Adult>NIBP Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	22-220
		Lower Limit	35	20-218
	Default Adult>NIBP MAP Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	120	25-230
		Lower Limit	50	23-228
	Default Adult>EtCO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	60	5-150
		Lower Limit	8	0-145
	Default Adult>FiCO2 Alarm	Upper Limit Enable	Off	On, Off
		Upper Limit	8	2-98
	Default Adult>RR/BR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	50	5-150
		Lower Limit	3	0-145
	Default Adult>No Breath Alarm	No Breath Alarm	Off	Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Default Adult>SpO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	52-100
		Lower Limit	85	50-98
	Default Adult>SpCO Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	10	2-100
		Lower Limit	0	0-98
	Default Adult>SpMet Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	3.0	2.0-100.0
		Lower Limit	0.0	0.0-98.0
	Default Adult>T2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	Default Adult>ΔT Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 5.0 °C: 2.8	°F: 0.2-90.0 °C: 0.2-50.0
		Lower Limit	°F: 0.0 °C: 0.0	°F: 0.0-89.8 °C: 0.0-49.8
	Default Adult>P1 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	220	-28-300
		Lower Limit	75	-30-298
	Default Adult>P1 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	-28-300
		Lower Limit	35	-30-298
	Default Adult>P1 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	120	-28-300
		Lower Limit	50	-30-298
	Default Adult>P2 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	220	-28-300
		Lower Limit	75	-30-298
	Default Adult>P2 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	-28-300
		Lower Limit	35	-30-298

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Default Adult>P2 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	120	-28-300
		Lower Limit	50	-30-298
	Default Adult>P3 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	220	-28-300
		Lower Limit	75	-30-298
	Default Adult>P3 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	-28-300
		Lower Limit	35	-30-298
	Default Adult>P3 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	120	-28-300
		Lower Limit	50	-30-298
	Default Pediatric>LTA Monitoring	LTA Monitoring	Off	On, Off
	Default Pediatric> HR/PR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	150	32-300
		Lower Limit	50	30-298
	Default Pediatric>NIBP Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	145	32-160
	Default Pediatric>NIBP Systolic Alarms	Lower Limit	75	30-158
	Default Pediatric>NIBP Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	22-130
		Lower Limit	35	20-128
	Default Pediatric>NIBP MAP Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	25-140
		Lower Limit	50	23-138
	Default Pediatric>EtCO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	60	5-150
		Lower Limit	8	0-145
	Default Pediatric>FiCO2 Alarm	Upper Limit Enable	Off	On, Off
		Upper Limit	8	2-98
	Default Pediatric> RR/BR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	50	5-150
		Lower Limit	3	0-145

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Default Pediatric>No Breath Alarm	No Breath Alarm	Off	Off, 10 sec, 15 sec, 20 sec, 25 sec, 30 sec, 40 sec, 50 sec, 60 sec
	Default Pediatric>SpO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	52-100
		Lower Limit	85	50-98
	Default Pediatric>SpCO Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	10	2-100
		Lower Limit	0	0-98
	Default Pediatric>SpMet Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	3	2.0-100.0
		Lower Limit	0	0.0-98.0
	Default Pediatric>T1 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	Default Pediatric>T2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	Default Pediatric>ΔT Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 5.0 °C: 2.8	°F: 0.2-90.0 °C: 0.2-50.0
		Lower Limit	°F: 0.0 °C: 0.0	°F: 0.0-89.8 °C: 0.0-49.8
	Default Pediatric>P1 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	145	-28-300
		Lower Limit	75	-30-298
	Default Pediatric>P1 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	-28-300
		Lower Limit	35	-30-298
	Default Pediatric>P1 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	-28-300
		Lower Limit	50	-30-298

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Default Pediatric>P2 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	145	-28-300
		Lower Limit	75	-30-298
	Default Pediatric>P2 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	-28-300
		Lower Limit	35	-30-298
	Default Pediatric>P2 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	-28-300
		Lower Limit	50	-30-298
	Default Pediatric>P3 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	145	-28-300
		Lower Limit	75	-30-298
	Default Pediatric>P3 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	-28-300
		Lower Limit	35	-30-298
	Default Pediatric>P3 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	110	-28-300
		Lower Limit	50	-30-298
	Default Neonate> HR/PR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	200	32-300
		Lower Limit	100	30-298
	Default Neonate>NIBP Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	22-120
		Lower Limit	50	20-118
	Default Neonate>NIBP Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	70	12-110
		Lower Limit	30	10-108
	Default Neonate>NIBP MAP Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	80	15-110
		Lower Limit	35	13-108
	Default Neonate>EtCO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	60	5-150
		Lower Limit	8	0-145

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Default Neonate>FiCO2 Alarm	Upper Limit Enable	Off	On, Off
		Upper Limit	8	2-98
	Default Neonate> RR/BR Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	80	5-150
		Lower Limit	12	0-145
	Default Neonate>No Breath Alarm	No Breath Alarm	Off	Off, 10 sec, 15 sec, 20 sec
	Default Neonate>SpO2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	95	52-100
		Lower Limit	85	50-98
	Default Neonate>SpCO Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	10	2-100
		Lower Limit	0	0-98
	Default Neonate>SpMet Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	3	2.0-100.0
		Lower Limit	0	0.0-98.0
	Default Neonate>T1 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	Default Neonate>T2 Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 100.0 °C: 37.8	°F: 34.0-122.0 °C: 2.0-50.0
		Lower Limit	°F: 95.0 °C: 35.0	°F: 32.0-120.0 °C: 0.0-48.0
	Default Neonate>ΔT Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	°F: 5.0 °C: 2.8	°F: 0.2-90.0 °C: 0.2-50.0
		Lower Limit	°F: 0.0 °C: 0.0	°F: 0.0-89.8 °C: 0.0-49.8
	Default Neonate>P1 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	-28-300
		Lower Limit	50	-30-298

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Default Neonate>P1 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	70	-28-300
		Lower Limit	30	-30-298
	Default Neonate>P1 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	80	-28-300
		Lower Limit	35	-30-298
	Default Neonate>P2 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	-28-300
		Lower Limit	50	-30-298
	Default Neonate>P2 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	70	-28-300
		Lower Limit	30	-30-298
	Default Neonate>P2 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	80	-28-300
		Lower Limit	35	-30-298
	Default Neonate>P3 Systolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	100	-28-300
		Lower Limit	50	-30-298
	Default Neonate>P3 Diastolic Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	70	-28-300
		Lower Limit	30	-30-298
	Default Neonate>P3 Mean Alarm	Upper Limit Enable	Off	On, Off
		Lower Limit Enable	Off	On, Off
		Upper Limit	80	-28-300
		Lower Limit	35	-30-298

Menu	Submenu	Parameter Name	Default Value	Parameter Values
Log	Treatment Options	Configuration Method	Select From Predefined List	Select From Predefined List, Define Custom Labels
		Treatment Button #1	O2	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #2	ASA	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #3	Nitro	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #4	Morph	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #5	IV	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #6	B Block	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #7	Lido	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #8	MgSO4	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #9	Valium	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
		Treatment Button #10	Sedate	O2, ASA, Nitro, Morph, IV, B Block, Lido, MgSO4, Valium, Sedate
	Waveform Recording	Continuous Waveform Recording	Disabled	Disabled, Enabled
		Record Displayed Waveforms	All Displayed Waveforms	All Displayed Waveforms, Top Waveform Only
		Record Additional Waveforms	CO2 Capnogram	CO2 Capnogram, IBP and CO2 Capnogram
		Record Pads Imp. Waveform	Disabled	Enabled, Disabled

Menu	Submenu	Parameter Name	Default Value	Parameter Values
Defib/Pacer	Default Settings	Adult Defib Ext. Pdl. Energy	120 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J, 85 J, 100 J, 120 J, 150 J, 200 J
		Pediatric Defib Ext. Pdl. Energy	50 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J, 85 J, 100 J, 120 J, 150 J, 200 J
		Neonate Defib Ext. Pdl. Energy	50 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J, 85 J, 100 J, 120 J, 150 J, 200 J
		Adult Defib Int. Pdl. Energy	10 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J
		Pediatric Defib Int. Pdl. Energy	10 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J
		Neonate Defib Int. Pdl. Energy	10 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J
		Sync After Cardioversion	Off	On, Off
		Default Pacer Mode	Demand	Demand, Fixed
		Default Pacer Rate	70	30-180 (<100 by increments of 5, >100 by increments of 10)
		Auto Display Pads/Paddles	No	Yes, No

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Energy Escalation	Basic Auto Energy Selection	Disabled	Disabled, Enabled
		Adult Shock 1 Energy	120 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
		Adult Shock 2 Energy	150 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
		Adult Shock 3 Energy	200 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J, 150 J, 200 J
		Pediatric Shock 1 Energy	50 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J,150 J, 200 J
		Pediatric Shock 2 Energy	70 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J,150 J, 200 J
		Pediatric Shock 3 Energy	85 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120J,150 J, 200 J
ECG	General	AC Mains Filter	60 Hz	Off, 50 Hz, 60 Hz
		Auto Add Filter ECG	No	Yes, No
	12 Lead ECG	Print on 12-Lead Acquire	Off	On, Off
		Print Copies	1	1, 2, 3, 4, 5
		12-Lead Format	3x4	2x6, 3x4, 3x4 Cabrera
		Print 10s Ldll	On	On, Off
		12-Ld Frequency Response	Filtered Diagnostic	Diagnostic, Filtered Diagnostic
		12-Ld Analysis Enabled	On	On, Off
		Patient Information Prompt	On	On, Off
		Print 12-Ld 1mV Bracket	No	Yes, No

Menu	Submenu	Parameter Name	Default Value	Parameter Values
NIBP Printer		Default NIBP Mode	Manual	Manual, Auto
		Default Auto Mode Interval	5 min	1 min, 2 min, 3 min, 5 min, 10 min, 15 min, 30 min, 60 min
		Default Cuff Inflation Target (Adult)	160	120-260 (by increments of 20)
		Default Cuff Inflation Target (Ped.)	120	80-150 (by increments of 10)
		Default Cuff Inflation Target (Neo.)	90	60-130 (by increments of 10)
		Print on Defib/Pacer Events	On	On, Off
		Print on Event	Off	On, Off
		Print on Treatment Snapshot	Off	On, Off
		Print Treatment Summary Snapshots	On	On, Off
		Print on Analysis Results	Off	On, Off
		Print on Presenting Rhythm	Off	On, Off
Display/ Configuration	Localization	Language	English	English, French Canadian, Swedish, Polish, Norwegian, Finnish, Danish, Dutch, Spanish, German, Italian, French
		Decimal Format	. (dot)	. (dot), , (comma)
		Date Format	MM/DD/YYYY	MM/DD/YYYY, DD/MM/YYYY, YYYY/MM/DD, MM-DD-YYYY, DD-MM-YYYY, YYYY-MM-DD
		Time Format	24 Hour	12 Hour, 24 Hour
		Temp Units	°F	°F, °C
		IBP Units	mmHg	mmHg, kPa
		CO2 Units	mmHg	mmHg, kPa,%
		NIBP Units	mmHg	mmHg, kPa
		ECG Lead Labels	AAMI	AAMI, IEC
		NIBP Display Format	S/D (M)	S/D (M), (M) S/D
		Length Units	Inch	Inch, cm
		AC Mains Filter	60 Hz	Off, 50 Hz, 60 Hz

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Color	ECG Color	Green	Green, Blue, Yellow, Red, White, Magenta, Cyan
		SpO_2 Color	Yellow	Green, Blue, Yellow, Red, White, Magenta, Cyan
		SpCO Color	Yellow	Green, Blue, Yellow, Red, White, Magenta, Cyan
		SpMet Color	Yellow	Green, Blue, Yellow, Red, White, Magenta, Cyan
		NIBP Color	Cyan	Green, Blue, Yellow, Red, White, Magenta, Cyan
		CO2 Color	Magenta	Green, Blue, Yellow, Red, White, Magenta, Cyan
		Resp Color	Magenta	Green, Blue, Yellow, Red, White, Magenta, Cyan
		Temp Color	White	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source P1 Color	Red	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source P2 Color	Cyan	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source P3 Color	White	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source ABP Color	Green	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source ART Color	Red	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source AO Color	Yellow	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source CVP Color	Cyan	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source ICP Color	White	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source LAP Color	Yellow	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source PAP Color	Yellow	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source RAP Color	Blue	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source UAP Color	Red	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source UVP Color	Blue	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source BAP Color	Red	Green, Blue, Yellow, Red, White, Magenta, Cyan
		IBP Source FAP Color	Green	Green, Blue, Yellow, Red, White, Magenta, Cyan
	Device Info	Unit ID	<blank>	Alphanumeric
		Department Name	<blank>	Alphanumeric
		Contact Telephone	<blank>	Alphanumeric

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Display Setup	Display FiCO2	No	No, Yes
		Screen Cycle Display Formats	All Available	All Available, Skip Large Numerics
		Top Trace Default ECG Lead	Pads	Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
		Auto ECG Lead	II	Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
		Default ECG Lead	Pads	Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
		Default ECG Leads	Not Assigned	Not Assigned, Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
			Not Assigned	Not Assigned, Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
			Not Assigned	Not Assigned, Pads, I, II, III, aVR, aVL, aVF, V, V1, V2, V3, V4, V5, V6
		Enable NVG Mode	No	No, Yes
	Supervisor Code		Contact the Zoll Technical Support Department if you do not have the default supervisor code	Numeric
	Log Clear Code	Log Clear Restriction	Passcode	User confirmation, Passcode
		Log Clear Code	1234	Numeric
AED	General	Power Up Mode	Manual	Manual, AED
		Restart Analysis After CPR	No	Yes, No
		Manual Mode Analysis	Single Analysis	Single Analysis, Analysis/ CPR Protocol
		Enable Voice Prompts	Always	Always, AED Mode Only
		Disarm Timeout	30 sec	30 sec, 60 sec
		CPR Time	2 min	1 min, 1.5 min, 2 min, 2.5 min, 3 min, 3.5 min, 4 min
		CPR Message After “No Shock Advised”	Perform CPR	Perform CPR, If No Pulse, Perform CPR
		CPR Message After Shock Delivered	Perform CPR	Perform CPR, If No Pulse, Perform CPR

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Energy Protocol	Adult Shock 1 Energy	120 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120 J, 150 J, 200 J
		Adult Shock 2 Energy	150 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120 J, 150 J, 200 J
		Adult Shock 3 Energy	200 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120 J, 150 J, 200 J
		Pediatric Shock 1 Energy	50 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120 J,150 J, 200 J
		Pediatric Shock 2 Energy	70 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120 J,150 J, 200 J
		Pediatric Shock 3 Energy	85 J	1 J, 2 J, 3 J, 4 J, 5 J, 6 J, 7 J, 8 J, 9 J, 10 J, 15 J, 20 J, 30 J, 50 J, 70 J 85 J, 100 J, 120 J,150 J, 200 J
	AED Mode	Begin with CPR	No	No, Yes
		Manual Mode Restriction	User Conformation	User Conformation, Passcode
		Manual Mode Passcode	<blank>	Numeric
		NIBP Monitoring	Disable	Disable, Enable
		CO2 Monitoring	Disable	Disable, Enable
		SpO2 Monitoring	Disable	Disable, Enable
		Temperature Monitoring	Disable	Disable, Enable
		12-Lead Monitoring	Disable	Disable, Enable
		Allow User to End CPR to Analyze	Yes	No, Yes

Menu	Submenu	Parameter Name	Default Value	Parameter Values
CPR		AHA/ERC Guidelines	2010	2005, 2010
		CPR Time	2 min	1 min, 1.5 min, 2 min, 2.5 min, 3 min, 3.5 min, 4 min
		Enable Metronome	Always	Never, Always, AED Mode Only
		Constant Metronome	Disabled	Enabled, Disabled
		Enable CPR Prompts	Text and Voice	Text and Voice, Text Only
		Display “Fully Release” Prompt	Yes	No, Yes
		Log CPR Metrics	Yes	No, Yes
		Auto Display Compression Time	No	No, Yes
Communications		Wireless	Enabled	Disabled, Enabled
		Bluetooth	Disabled	Disabled, Enabled
		Wi-Fi	Disabled	Disabled, Enabled
		Power Management	Enabled	Disabled, Enabled
		Power Management	Disabled	Disabled, Enabled
		Cellular	Configure	
		Ethernet	Enabled	Disabled, Enabled
		Reports	Configure	
		Disclosure Log	Configure	
Service	Device Tests	Keypad Test		
		LED Test		
		LCD Test		
		RFU Indicator Test		
		Audio Test		
		Printer Test		
		Battery Test		
		Fan Test		
		NIBP Test		
		USB Test		
	Device Configuration	N/A		
	Update/Upgrade	Field Upgrades		
		Software Updates		
	Diagnostic-ECG	General>Resp Breath Marker	Off	On, Off
		Error Counts>ECG CRC Count		
	Diagnostic-NIBP	General		
		Calibration Info		
		Reading Counts		
		Cycle/Error Counts		
		NIBP Test		
	Diagnostic-CO2			

Menu	Submenu	Parameter Name	Default Value	Parameter Values
	Diagnostic-SpO2	Version Info		
		Error Counts		
	Diagnostic-Temp/IBP	Error Counts		
	Diagnostic-Defib/ Pacer	Version Info		
		Cycle Counts		
		Error Counts		
	Device Monitoring			
	Research Options	Waveform Recording Sample Rate	250 Hz	250 Hz, 500 Hz
	Supervisor Code	Supervisor Code	<blank>	Numeric
	Import Configuration			
	Export Configuration			